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LOCUS       AX816067                 20 bp    DNA     linear   PAT 09-DEC-2003
DEFINITION  Sequence 3 from Patent WO03066649.
ACCESSION   AX816067
VERSION     AX816067.1  GI:39646663
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Jiang,Z.H., Koganty,R.R., Yalamati,D. and Baek,M.G.
  TITLE     Immunostimulatory, covalently lipidated oligonucleotides
  JOURNAL   Patent: WO 03066649-A 3 14-AUG-2003;
            Biomira Inc. (CA)
FEATURES             Location/Qualifiers
     source          1..20
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                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="activating sequence"
ORIGIN
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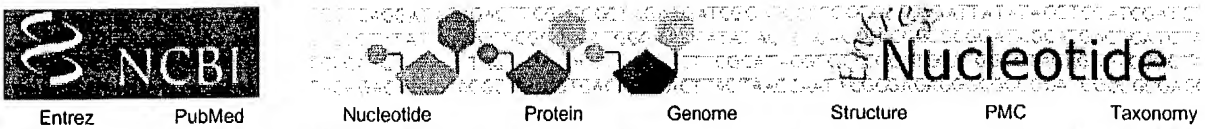

1: AR340848. Sequence 8 from p...[gi:33732695]

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LOCUS       AR340848                 39 bp    DNA     linear   PAT 17-AUG-2003
DEFINITION  Sequence 8 from patent US 6573071.
ACCESSION   AR340848
VERSION     AR340848.1  GI:33732695
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 39)
  AUTHORS   Himmelspach,M., Schlokat,U., Dorner,F., Fisch,A. and Eibl,J.
  TITLE     Factor X analogues with a modified protease cleavage site
  JOURNAL   Patent: US 6573071-A 8 03-JUN-2003;
FEATURES             Location/Qualifiers
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                     /organism="unknown"
                     /mol_type="genomic DNA"
ORIGIN
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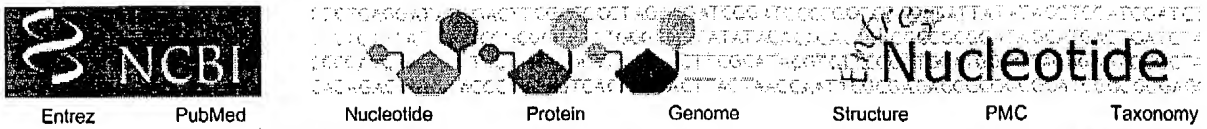


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LOCUS       AX547938                  27 bp    DNA     linear   PAT 01-MAR-2003
DEFINITION  Sequence 1077 from Patent WO02053141.
ACCESSION   AX547938
VERSION     AX547938.1  GI:25813082
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Bratzler,R.L.
  TITLE     Inhibition of angiogenesis by nucleic acids
  JOURNAL   Patent: WO 02053141-A 1077 11-JUL-2002;
            Coley Pharmaceutical Group, Inc. (US)
FEATURES             Location/Qualifiers
     source          1..27
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                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic Sequence"
ORIGIN
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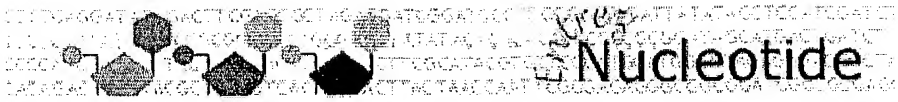

1: BD070374. Factor X-analogue...[gi:22615977]

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LOCUS       BD070374                  39 bp    DNA     linear   PAT 27-AUG-2002
DEFINITION  Factor X-analogues with modified protease cleavage site.
ACCESSION   BD070374
VERSION     BD070374.1  GI:22615977
KEYWORDS    JP 2001513631-A/8.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 39)
  AUTHORS   Himmelspach,M., Schlokat,U., Dorner,F., Andreas, Fisch and Eibl,J.
  TITLE     Factor X-analogues with modified protease cleavage site
  JOURNAL   Patent: JP 2001513631-A 8 04-SEP-2001;
            BAXTER AG
COMMENT     OS   Unidentified
            PN   JP 2001513631-A/8
            PD   04-SEP-2001
            PF   27-FEB-1998 JP 1998537062
            PR   27-FEB-1997 AT     A 335/97
            PI   MICHELE HIMMELSPACH,UWE SCHLOKAT,FRIEDRICH DORNER,ANDREAS PI
            FISCH,JOHANN EIBL
            PC   C12N15/57,C12N9/64,A61K38/48
            CC   Strandedness: Single;
            CC   Topology: Linear;
            CC   Factor X-analogues with modified protease cleavage site FH
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FEATURES             Location/Qualifiers
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                     /mol_type="genomic DNA"
                     /db_xref="taxon:32644"
ORIGIN
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LOCUS       AX465423                  19 bp    DNA     linear   PAT 16-JUL-2002
DEFINITION  Sequence 91 from Patent WO0211761.
ACCESSION   AX465423
VERSION     AX465423.1  GI:21899786
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Prince,G. and Klinman,D.M.
  TITLE     Vaccine against RSV
  JOURNAL   Patent: WO 0211761-A 91 14-FEB-2002;
            HENRY M. JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY
            MEDICINE (US)
FEATURES             Location/Qualifiers
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                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic oligonucleotide"
ORIGIN
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LOCUS       AX465422                  20 bp    DNA     linear   PAT 16-JUL-2002
DEFINITION  Sequence 90 from Patent WO0211761.
ACCESSION   AX465422
VERSION     AX465422.1  GI:21899785
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Prince,G. and Klinman,D.M.
  TITLE     Vaccine against RSV
  JOURNAL   Patent: WO 0211761-A 90 14-FEB-2002;
            HENRY M. JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY
            MEDICINE (US)
FEATURES             Location/Qualifiers
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                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic oligonucleotide"
ORIGIN
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LOCUS       AX465403                 19 bp    DNA     linear   PAT 16-JUL-2002
DEFINITION  Sequence 71 from Patent WO0211761.
ACCESSION   AX465403
VERSION     AX465403.1  GI:21899766
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Prince,G. and Klinman,D.M.
  TITLE     Vaccine against RSV
  JOURNAL   Patent: WO 0211761-A 71 14-FEB-2002;
            HENRY M. JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY
            MEDICINE (US)
FEATURES             Location/Qualifiers
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                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic oligonucleotide"
ORIGIN
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LOCUS       AX465393                  20 bp    DNA     linear   PAT 16-JUL-2002
DEFINITION  Sequence 61 from Patent WO0211761.
ACCESSION   AX465393
VERSION     AX465393.1  GI:21899756
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Prince,G. and Klinman,D.M.
  TITLE     Vaccine against RSV
  JOURNAL   Patent: WO 0211761-A 61 14-FEB-2002;
            HENRY M. JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY
            MEDICINE (US)
FEATURES             Location/Qualifiers
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                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic oligonucleotide"
ORIGIN
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☐ 1: AX465392. Sequence 60 from ...[gi:21899755]

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LOCUS       AX465392                  20 bp    DNA     linear   PAT 16-JUL-2002
DEFINITION  Sequence 60 from Patent WO0211761.
ACCESSION   AX465392
VERSION     AX465392.1  GI:21899755
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Prince,G. and Klinman,D.M.
  TITLE     Vaccine against RSV
  JOURNAL   Patent: WO 0211761-A 60 14-FEB-2002;
            HENRY M. JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY
            MEDICINE (US)
FEATURES             Location/Qualifiers
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                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic oligonucleotide"
ORIGIN
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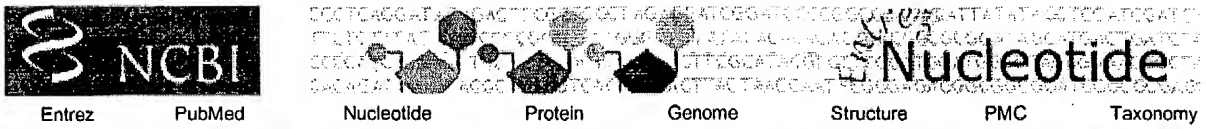


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LOCUS       AX465391                  20 bp    DNA     linear   PAT 16-JUL-2002
DEFINITION  Sequence 59 from Patent WO0211761.
ACCESSION   AX465391
VERSION     AX465391.1  GI:21899754
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Prince,G. and Klinman,D.M.
  TITLE     Vaccine against RSV
  JOURNAL   Patent: WO 0211761-A 59 14-FEB-2002;
            HENRY M. JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY
            MEDICINE (US)
FEATURES             Location/Qualifiers
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                     /note="Synthetic oligonucleotide"
ORIGIN
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1: AX465388. Sequence 56 from ...[gi:21899751]

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LOCUS       AX465388                  20 bp    DNA     linear   PAT 16-JUL-2002
DEFINITION  Sequence 56 from Patent WO0211761.
ACCESSION   AX465388
VERSION     AX465388.1  GI:21899751
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Prince,G. and Klinman,D.M.
  TITLE     Vaccine against RSV
  JOURNAL   Patent: WO 0211761-A 56 14-FEB-2002;
            HENRY M. JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY
            MEDICINE (US)
FEATURES             Location/Qualifiers
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                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic oligonucleotide"
ORIGIN
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LOCUS       AX465387                  20 bp    DNA     linear   PAT 16-JUL-2002
DEFINITION  Sequence 55 from Patent WO0211761.
ACCESSION   AX465387
VERSION     AX465387.1  GI:21899750
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Prince,G. and Klinman,D.M.
  TITLE     Vaccine against RSV
  JOURNAL   Patent: WO 0211761-A 55 14-FEB-2002;
            HENRY M. JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY
            MEDICINE (US)
FEATURES             Location/Qualifiers
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                     /note="Synthetic oligonucleotide"
ORIGIN
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☐ 1: AX465384. Sequence 52 from ...[gi:21899747] Links

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DEFINITION  Sequence 52 from Patent WO0211761.
ACCESSION   AX465384
VERSION     AX465384.1  GI:21899747
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Prince,G. and Klinman,D.M.
  TITLE     Vaccine against RSV
  JOURNAL   Patent: WO 0211761-A 52 14-FEB-2002;
            HENRY M. JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY
            MEDICINE (US)
FEATURES             Location/Qualifiers
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ORIGIN
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DEFINITION  Sequence 50 from Patent WO0211761.
ACCESSION   AX465382
VERSION     AX465382.1  GI:21899745
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Prince,G. and Klinman,D.M.
  TITLE     Vaccine against RSV
  JOURNAL   Patent: WO 0211761-A 50 14-FEB-2002;
            HENRY M. JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY
            MEDICINE (US)
FEATURES             Location/Qualifiers
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ORIGIN
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LOCUS       AX352255                 18 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 551 from Patent WO0193902.
ACCESSION   AX352255
VERSION     AX352255.1  GI:18617538
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 551 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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                     /note="Synthetic HDR"
ORIGIN
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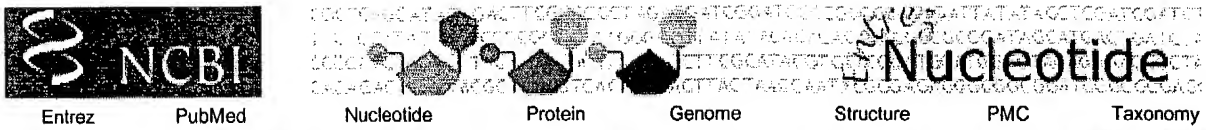


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LOCUS       AX352254                  20 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 550 from Patent WO0193902.
ACCESSION   AX352254
VERSION     AX352254.1  GI:18617537
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 550 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
     source          1..20
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                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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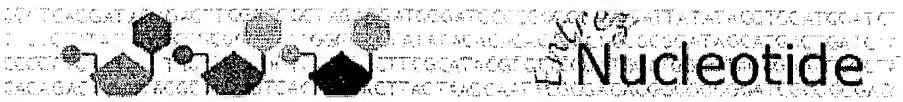


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LOCUS       AX352253                 17 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 549 from Patent WO0193902.
ACCESSION   AX352253
VERSION     AX352253.1  GI:18617536
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 549 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
     source          1..17
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                     /mol_type="unassigned DNA"
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                     /note="Synthetic HDR"
ORIGIN
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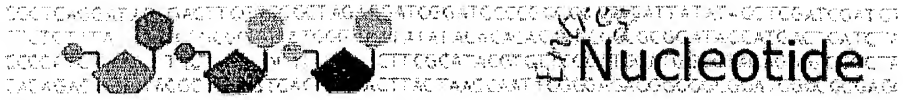


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DEFINITION  Sequence 548 from Patent WO0193902.
ACCESSION   AX352252
VERSION     AX352252.1  GI:18617535
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 548 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
     source          1..40
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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DEFINITION  Sequence 546 from Patent WO0193902.
ACCESSION   AX352250
VERSION     AX352250.1  GI:18617533
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 546 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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DEFINITION  Sequence 545 from Patent WO0193902.
ACCESSION   AX352249
VERSION     AX352249.1  GI:18617532
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 545 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
     source          1..17
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                     /note="Synthetic HDR"
ORIGIN
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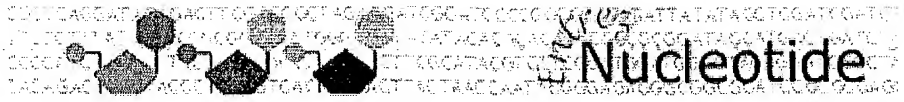

Entrez PubMed Nucleotide Protein Genome Structure PMC Taxonomy Book

Search Nucleotide for Go Clear

Limits Preview/Index History Clipboard Details

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☐ 1: AX352248. Sequence 544 from...[gi:18617531] Links

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LOCUS       AX352248                 22 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 544 from Patent WO0193902.
ACCESSION   AX352248
VERSION     AX352248.1  GI:18617531
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 544 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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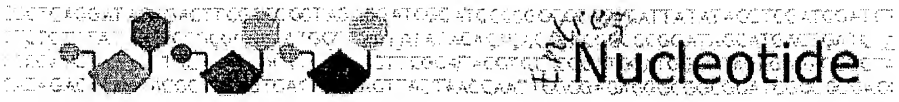


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DEFINITION  Sequence 540 from Patent WO0193902.
ACCESSION   AX352244
VERSION     AX352244.1  GI:18617527
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 540 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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ORIGIN
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LOCUS       AX352242                 20 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 538 from Patent WO0193902.
ACCESSION   AX352242
VERSION     AX352242.1  GI:18617525
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 538 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
     source          1..20
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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LOCUS       AX352241                  28 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 537 from Patent WO0193902.
ACCESSION   AX352241
VERSION     AX352241.1  GI:18617524
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 537 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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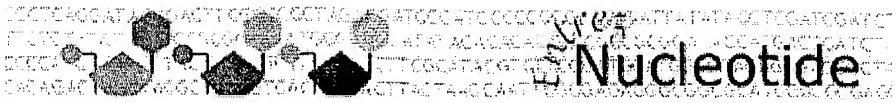


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LOCUS       AX352240                  26 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 536 from Patent WO0193902.
ACCESSION   AX352240
VERSION     AX352240.1  GI:18617523
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 536 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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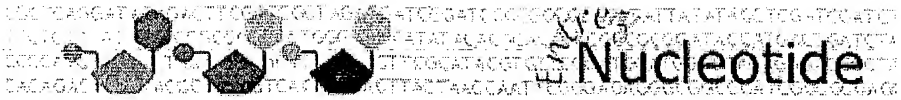


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LOCUS       AX352239                  28 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 535 from Patent WO0193902.
ACCESSION   AX352239
VERSION     AX352239.1  GI:18617522
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 535 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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LOCUS       AX352238                  25 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 534 from Patent WO0193902.
ACCESSION   AX352238
VERSION     AX352238.1  GI:18617521
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 534 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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//
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LOCUS       AX352237                  29 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 533 from Patent WO0193902.
ACCESSION   AX352237
VERSION     AX352237.1  GI:18617520
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 533 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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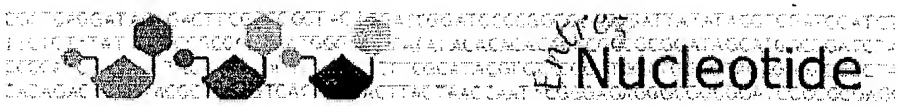


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LOCUS       AX352233                  28 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 529 from Patent WO0193902.
ACCESSION   AX352233
VERSION     AX352233.1  GI:18617516
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 529 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
     source          1..28
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                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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LOCUS       AX352231                 28 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 527 from Patent WO0193902.
ACCESSION   AX352231
VERSION     AX352231.1  GI:18617514
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 527 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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1: AX352230. Sequence 526 from...[gi:18617513]

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LOCUS       AX352230                  30 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 526 from Patent WO0193902.
ACCESSION   AX352230
VERSION     AX352230.1  GI:18617513
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 526 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
     source          1..30
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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//
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1: AX352229. Sequence 525 from...[gi:18617512]

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LOCUS       AX352229                  28 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 525 from Patent WO0193902.
ACCESSION   AX352229
VERSION     AX352229.1  GI:18617512
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 525 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
        1 ggtgcaccgg tgcaggggg aaaaaaaa
//
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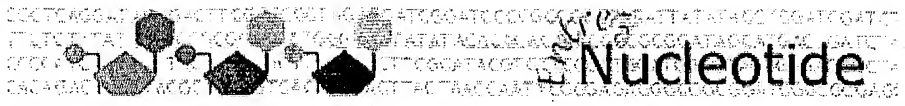


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LOCUS       AX352228                 26 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 524 from Patent WO0193902.
ACCESSION   AX352228
VERSION     AX352228.1  GI:18617511
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 524 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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                     /note="Synthetic HDR"
ORIGIN
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1: AX352227. Sequence 523 from...[gi:18617510]

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LOCUS       AX352227                 28 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 523 from Patent WO0193902.
ACCESSION   AX352227
VERSION     AX352227.1  GI:18617510
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 523 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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ORIGIN
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//
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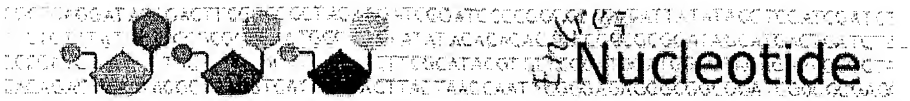


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LOCUS       AX352226                  25 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 522 from Patent WO0193902.
ACCESSION   AX352226
VERSION     AX352226.1  GI:18617509
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 522 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
     source          1..25
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                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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LOCUS       AX352225                  30 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 521 from Patent WO0193902.
ACCESSION   AX352225
VERSION     AX352225.1  GI:18617508
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 521 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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                     /note="Synthetic HDR"
ORIGIN
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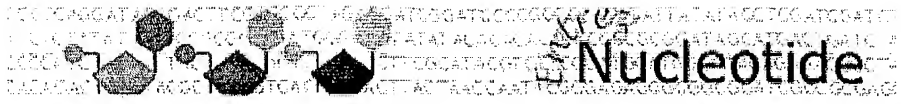


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LOCUS       AX352221                 28 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 517 from Patent WO0193902.
ACCESSION   AX352221
VERSION     AX352221.1  GI:18617504
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 517 13-DEC-2001;
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FEATURES             Location/Qualifiers
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ORIGIN
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1: AX352219. Sequence 515 from...[gi:18617502]

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DEFINITION  Sequence 515 from Patent WO0193902.
ACCESSION   AX352219
VERSION     AX352219.1  GI:18617502
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 515 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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                     /note="Synthetic HDR"
ORIGIN
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1: AX352218. Sequence 514 from...[gi:18617501]

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LOCUS       AX352218                 20 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 514 from Patent WO0193902.
ACCESSION   AX352218
VERSION     AX352218.1  GI:18617501
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 514 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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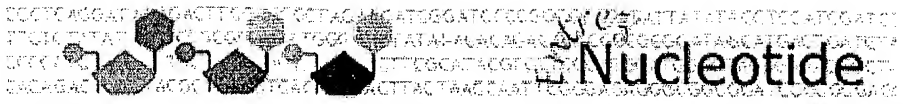

1: AX352217. Sequence 513 from...[gi:18617500]

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LOCUS       AX352217                 18 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 513 from Patent WO0193902.
ACCESSION   AX352217
VERSION     AX352217.1  GI:18617500
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 513 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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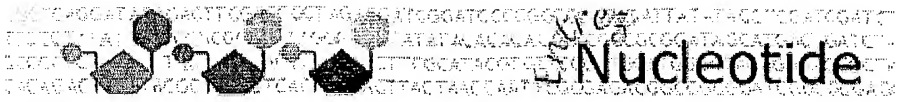


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LOCUS       AX352216                  20 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 512 from Patent WO0193902.
ACCESSION   AX352216
VERSION     AX352216.1  GI:18617499
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 512 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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                     /note="Synthetic HDR"
ORIGIN
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LOCUS       AX352215                  17 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 511 from Patent WO0193902.
ACCESSION   AX352215
VERSION     AX352215.1  GI:18617498
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 511 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
     source          1..17
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                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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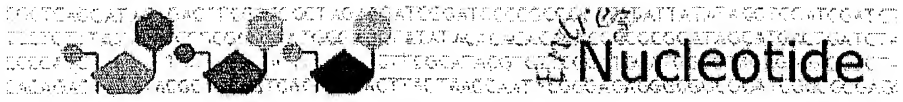


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LOCUS       AX352211                  20 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 507 from Patent WO0193902.
ACCESSION   AX352211
VERSION     AX352211.1  GI:18617494
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 507 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
     source          1..20
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
        1 ggtgcaccgg tgcaggggg
//
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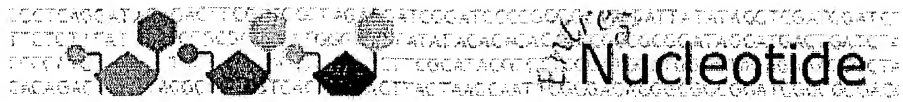

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Links

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LOCUS       AX352209                  20 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 505 from Patent WO0193902.
ACCESSION   AX352209
VERSION     AX352209.1  GI:18617492
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 505 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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DEFINITION  Sequence 504 from Patent WO0193902.
ACCESSION   AX352208
VERSION     AX352208.1  GI:18617491
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 504 13-DEC-2001;
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FEATURES             Location/Qualifiers
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                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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//
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DEFINITION  Sequence 503 from Patent WO0193902.
ACCESSION   AX352207
VERSION     AX352207.1  GI:18617490
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 503 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
        1 tgcatcgatg cagggggg
//
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LOCUS       AX352206                  20 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 502 from Patent WO0193902.
ACCESSION   AX352206
VERSION     AX352206.1  GI:18617489
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 502 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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                     /organism="synthetic construct"
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                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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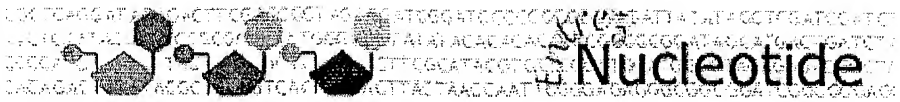

☐ 1: AX352205. Sequence 501 from...[gi:18617488]

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LOCUS       AX352205                  17 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 501 from Patent WO0193902.
ACCESSION   AX352205
VERSION     AX352205.1  GI:18617488
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 501 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
     source          1..17
                     /organism="synthetic construct"
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                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
        1 tgcatcgatg caggggg
//
```

1: AX352204. Sequence 500 from...[gi:18617487]

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LOCUS       AX352204                  22 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 500 from Patent WO0193902.
ACCESSION   AX352204
VERSION     AX352204.1  GI:18617487
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 500 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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                     /note="Synthetic HDR"
ORIGIN
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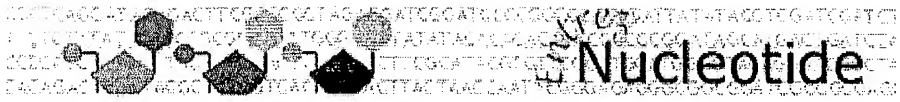
Jun 8 2004 17:01:12

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DEFINITION  Sequence 496 from Patent WO0193902.
ACCESSION   AX352200
VERSION     AX352200.1  GI:18617483
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 496 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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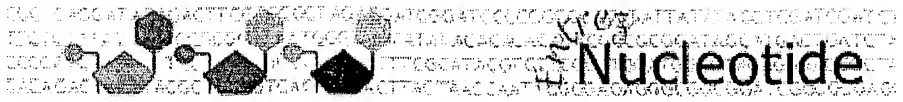


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LOCUS       AX352198                  20 bp    DNA     linear   PAT 06-FEB-2002
DEFINITION  Sequence 494 from Patent WO0193902.
ACCESSION   AX352198
VERSION     AX352198.1  GI:18617481
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 494 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
     source          1..20
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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DEFINITION  Sequence 463 from Patent WO0193902.
ACCESSION   AX352167
VERSION     AX352167.1  GI:18617450
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Mond,J.J., Flora,M. and Klinman,D.M.
  TITLE     Immunostimulatory rna/dna hybrid molecules
  JOURNAL   Patent: WO 0193902-A 463 13-DEC-2001;
            Biosynexus Incorporated (US)
FEATURES             Location/Qualifiers
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                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic HDR"
ORIGIN
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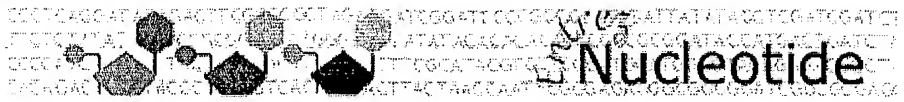


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DEFINITION  Sequence 36 from Patent WO0122990.
ACCESSION   AX105138
VERSION     AX105138.1  GI:13921288
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Hartmann,G.D., Bratzler,R.L. and Krieg,A.U.
  TITLE     Methods related to immunostimulatory nucleic acid-induced
            interferon
  JOURNAL   Patent: WO 0122990-A 36 05-APR-2001;
            Coley Pharmaceutical Group, Inc. (US) ; UNIVERSITY OF IOWA RESEARCH
            FOUNDATION (US)
FEATURES             Location/Qualifiers
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                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic Oligonucleotide"
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                     /note="Backbone has phosphorothioate linkages."
     misc_feature    3..21
                     /note="Backbone has phosphodiester linkages."
     misc_feature    22..26
                     /note="Backbone has phosphorothioate linkages."
     misc_feature    27
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ORIGIN
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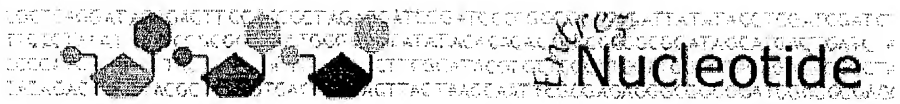
Jun 8 2004 17:01:12



Entrez PubMed Nucleotide Protein Genome Structure PMC Taxonomy Book

Search Nucleotide for Go Clear

Limits Preview/Index History Clipboard Details

Display default Show: 20 Send to File Get Subsequence Feat

1: AX194473. Sequence 73 from ...[gi:15385129] Links

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LOCUS       AX194473                 19 bp    DNA     linear   PAT 28-AUG-2001
DEFINITION  Sequence 73 from Patent WO0151500.
ACCESSION   AX194473
VERSION     AX194473.1  GI:15385129
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Klinman,D., Ishii,K. and Verthelyi,D.
  TITLE     Oligodeoxynucleotide and its use to induce an immune response
  JOURNAL   Patent: WO 0151500-A 73 19-JUL-2001;
            Secretary of the Department of Health and Human Services (US)
FEATURES             Location/Qualifiers
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                     /note="Synthetic DNA"
ORIGIN
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Jun 8 2004 17:01:12


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LOCUS       AX194472                  20 bp    DNA     linear   PAT 28-AUG-2001
DEFINITION  Sequence 72 from Patent WO0151500.
ACCESSION   AX194472
VERSION     AX194472.1  GI:15385128
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Klinman,D., Ishii,K. and Verthelyi,D.
  TITLE     Oligodeoxynucleotide and its use to induce an immune response
  JOURNAL   Patent: WO 0151500-A 72 19-JUL-2001;
            Secretary of the Department of Health and Human Services (US)
FEATURES             Location/Qualifiers
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                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
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ORIGIN
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LOCUS       AX194443                  20 bp    DNA     linear   PAT 28-AUG-2001
DEFINITION  Sequence 43 from Patent WO0151500.
ACCESSION   AX194443
VERSION     AX194443.1  GI:15385099
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Klinman,D., Ishii,K. and Verthelyi,D.
  TITLE     Oligodeoxynucleotide and its use to induce an immune response
  JOURNAL   Patent: WO 0151500-A 43 19-JUL-2001;
            Secretary of the Department of Health and Human Services (US)
FEATURES             Location/Qualifiers
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                     /organism="synthetic construct"
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                     /note="Synthetic DNA"
ORIGIN
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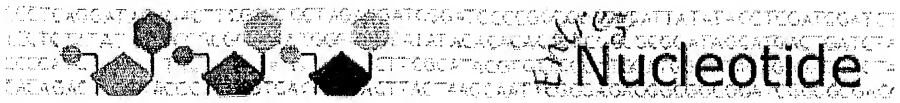

1: AX194441. Sequence 41 from ...[gi:15385097]

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LOCUS       AX194441                  20 bp    DNA     linear   PAT 28-AUG-2001
DEFINITION  Sequence 41 from Patent WO0151500.
ACCESSION   AX194441
VERSION     AX194441.1  GI:15385097
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Klinman,D., Ishii,K. and Verthelyi,D.
  TITLE     Oligodeoxynucleotide and its use to induce an immune response
  JOURNAL   Patent: WO 0151500-A 41 19-JUL-2001;
            Secretary of the Department of Health and Human Services (US)
FEATURES             Location/Qualifiers
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ORIGIN
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1: AX194438. Sequence 38 from ...[gi:15385094]

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LOCUS       AX194438                 20 bp    DNA     linear   PAT 28-AUG-2001
DEFINITION  Sequence 38 from Patent WO0151500.
ACCESSION   AX194438
VERSION     AX194438.1  GI:15385094
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Klinman,D., Ishii,K. and Verthelyi,D.
  TITLE     Oligodeoxynucleotide and its use to induce an immune response
  JOURNAL   Patent: WO 0151500-A 38 19-JUL-2001;
            Secretary of the Department of Health and Human Services (US)
FEATURES             Location/Qualifiers
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ORIGIN
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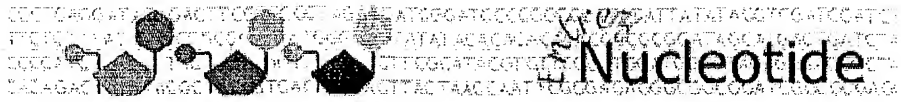


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DEFINITION  Sequence 37 from Patent WO0151500.
ACCESSION   AX194437
VERSION     AX194437.1  GI:15385093
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Klinman,D., Ishii,K. and Verthelyi,D.
  TITLE     Oligodeoxynucleotide and its use to induce an immune response
  JOURNAL   Patent: WO 0151500-A 37 19-JUL-2001;
            Secretary of the Department of Health and Human Services (US)
FEATURES             Location/Qualifiers
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ORIGIN
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LOCUS       AX194434                  20 bp    DNA     linear   PAT 28-AUG-2001
DEFINITION  Sequence 34 from Patent WO0151500.
ACCESSION   AX194434
VERSION     AX194434.1  GI:15385090
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Klinman,D., Ishii,K. and Verthelyi,D.
  TITLE     Oligodeoxynucleotide and its use to induce an immune response
  JOURNAL   Patent: WO 0151500-A 34 19-JUL-2001;
            Secretary of the Department of Health and Human Services (US)
FEATURES             Location/Qualifiers
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ORIGIN
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DEFINITION  Sequence 53 from Patent WO0151500.
ACCESSION   AX194453
VERSION     AX194453.1  GI:15385109
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Klinman,D., Ishii,K. and Verthelyi,D.
  TITLE     Oligodeoxynucleotide and its use to induce an immune response
  JOURNAL   Patent: WO 0151500-A 53 19-JUL-2001;
            Secretary of the Department of Health and Human Services (US)
FEATURES             Location/Qualifiers
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ORIGIN
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DEFINITION  Sequence 42 from Patent WO0151500.
ACCESSION   AX194442
VERSION     AX194442.1  GI:15385098
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Klinman,D., Ishii,K. and Verthelyi,D.
  TITLE     Oligodeoxynucleotide and its use to induce an immune response
  JOURNAL   Patent: WO 0151500-A 42 19-JUL-2001;
            Secretary of the Department of Health and Human Services (US)
FEATURES             Location/Qualifiers
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ORIGIN
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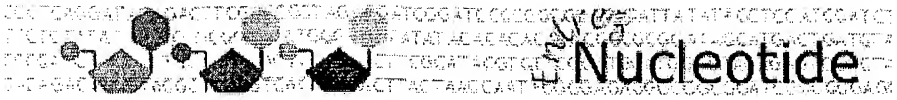


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ACCESSION   AX194439
VERSION     AX194439.1  GI:15385095
KEYWORDS    .
SOURCE      synthetic construct
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            artificial sequences.
REFERENCE   1
  AUTHORS   Klinman,D., Ishii,K. and Verthelyi,D.
  TITLE     Oligodeoxynucleotide and its use to induce an immune response
  JOURNAL   Patent: WO 0151500-A 39 19-JUL-2001;
            Secretary of the Department of Health and Human Services (US)
FEATURES             Location/Qualifiers
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                     /mol_type="unassigned DNA"
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                     /note="Synthetic DNA"
ORIGIN
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DEFINITION  Sequence 32 from Patent WO0151500.
ACCESSION   AX194432
VERSION     AX194432.1  GI:15385088
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Klinman,D., Ishii,K. and Verthelyi,D.
  TITLE     Oligodeoxynucleotide and its use to induce an immune response
  JOURNAL   Patent: WO 0151500-A 32 19-JUL-2001;
            Secretary of the Department of Health and Human Services (US)
FEATURES             Location/Qualifiers
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                     /organism="synthetic construct"
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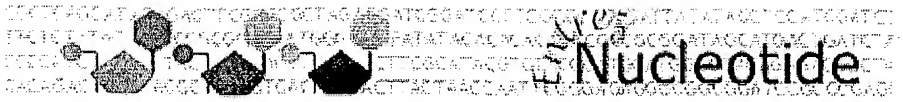


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LOCUS       AX104885                  27 bp    DNA     linear   PAT 30-APR-2001
DEFINITION  Sequence 1077 from Patent WO0122972.
ACCESSION   AX104885
VERSION     AX104885.1  GI:13921082
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Krieg,A.M., Schetter,C. and Vollmer,J.C.
  TITLE     Immunostimulatory nucleic acids
  JOURNAL   Patent: WO 0122972-A 1077 05-APR-2001;
            UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; Coley Pharmaceutical
            GmbH (DE)
FEATURES             Location/Qualifiers
     source          1..27
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
ORIGIN
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IDENTIFIERS

dbGSS Id: **2082430**
GSS name: 1M0444C13R
GenBank Acc: AZ615410
GenBank gi: 11737600

CLONE INFO
Clone Id: UUGC1M0444C13 (R)
Insert length: 10000
Plate: 0444 Row: C Column: 13
DNA type: Genomic

PRIMERS
Sequencing: CACACAGGAAACAGCTATGACC

SEQUENCE
GTGCGCCCGGCGGCGGCCGGTCGCCGGCCGGGGGGCG
Quality: High quality sequence stops at base: 37

Entry Created: Dec 13 2000
Last Updated: Dec 13 2000

LIBRARY
CLASS: plasmid ends
Lib Name: Mouse 10kb plasmid UUGC1M library
Organism: Mus musculus
Strain: C57BL/6J
Sex: Male
Lab host: E. Coli strain XL10-Gold, T1-resistant, F-
Vector: PWD42nv
Description: Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (gi|4732114|gb |AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance.

SUBMITTER

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Institution:	University of Utah
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Tel:	801 585 5606
Fax:	801 585 7177
E-mail:	ddunn@genetics.utah.edu

CITATIONS

Title:	Mouse whole genome scaffolding with paired end reads from 10kb plasmid inserts
Authors:	Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil ,C., Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen ,T., Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausern,A., Wright,D.,Weiss,R.
Year:	2000
Status:	Unpublished

MAP DATA

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IDENTIFIERS

dbEST Id:	**2261187**
EST name:	tj20d05.x1
GenBank Acc:	AI446513
GenBank gi:	4295736

CLONE INFO

Clone Id:	IMAGE:2142057 (3')
Source:	NCI
DNA type:	cDNA

PRIMERS

Sequencing:	-40UP from Gibco
PolyA Tail:	Unknown

SEQUENCE

AACCGGCCCCCCCCGGCCGGCCGGAAAAAAGGGG

Quality: Trace considered overall poor quality.

Entry Created: Feb 23 1999
Last Updated: Mar 9 1999

COMMENTS

Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R. Emmert-Buck, M.D., Ph.D.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: Greg Lennon, Ph.D.
DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: www-bio.llnl.gov/bbrp/image/image.html
Trace considered overall poor quality

PUTATIVE ID Assigned by submitter
SW:CA11_CHICK P02457 PROCOLLAGEN ALPHA 1(I) CHAIN PRECURSOR.
;

LIBRARY

Lib Name:	NCI_CGAP_Gas4
Organism:	Homo sapiens
Organ:	stomach
Tissue type:	poorly differentiated adenocarcinoma with signet ring cell features
Lab host:	DH10B
Vector:	pCMV-SPORT6
R. Site 1:	SalI
R. Site 2:	NotI

Description: Cloned unidirectionally. Primer: Oligo dT. Average insert size 1.69 kb. Life Technologies catalog #: 11549-011

SUBMITTER

Name: Robert Strausberg, Ph.D.
E-mail: cgapbs-r@mail.nih.gov

CITATIONS

Title: National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index
Authors: NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap
Year: 1997
Status: Unpublished

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provided by InfoChem.

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DICTIONARY FILE UPDATES:  30 JUN 2004  HIGHEST RN 701907-96-2

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  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html
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Sequence length limited to greater than 16 nt but less than 43 nt

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L7          847 SEA FILE=REGISTRY ABB=ON  L6 AND NNNACCGGTNNNN{0-10}G{4-10}|NNN
                ATCGATNNNN{0-10}G{4-10}|NNNGCCGGCNNNN{0-10}G{4-10}|NNNGTCGACNNN
                N{0-10}G{4-10}/SQSN
L11         368 SEA FILE=REGISTRY ABB=ON  L7 AND NNARYCGRYTNNN{0-10}G{4-10}|NNT
                RYCGRYANNN{0-10}G{4-10}|NNCRYCGRYGNNN{0-10}G{4-10}|NNGRYCGRYCNN
                N{0-10}G{4-10}/SQSN
L13         266 SEA FILE=REGISTRY ABB=ON  L11 AND NANRYCGRYNTNN{0-10}G{4-10}|NT
                NRYCGRYNANN{0-10}G{4-10}|NCNRYCGRYNGNN{0-10}G{4-10}|NGNRYCGRYNC
                NN{0-10}G{4-10}/SQSN
L14         178 SEA FILE=REGISTRY ABB=ON  L13 AND ANNRYCGRYNNTN{0-10}G{4-10}|TN
                NRYCGRYNNAN{0-10}G{4-10}|CNNRYCGRYNNGN{0-10}G{4-10}|GNNRYCGRYNN
                CN{0-10}G{4-10}/SQSN
L15          70 SEA FILE=REGISTRY ABB=ON  L14 AND GENBANK/LC
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all answers from GenBank

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L15  ANSWER 1 OF 70  REGISTRY  COPYRIGHT 2004 ACS on STN
IN   GenBank AX816067 (9CI)

L15  ANSWER 2 OF 70  REGISTRY  COPYRIGHT 2004 ACS on STN
IN   GenBank AR340848 (9CI)

L15  ANSWER 3 OF 70  REGISTRY  COPYRIGHT 2004 ACS on STN
IN   GenBank AX547938 (9CI)

L15  ANSWER 4 OF 70  REGISTRY  COPYRIGHT 2004 ACS on STN
IN   GenBank BD070374 (9CI)

L15  ANSWER 5 OF 70  REGISTRY  COPYRIGHT 2004 ACS on STN
IN   GenBank AX465423 (9CI)

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IN   GenBank AX465422 (9CI)

L15  ANSWER 7 OF 70  REGISTRY  COPYRIGHT 2004 ACS on STN
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GenBank accession #'s

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IN GenBank AX465393 (9CI)

L15 ANSWER 9 OF 70 REGISTRY COPYRIGHT 2004 ACS on STN
IN GenBank AX465392 (9CI)

L15 ANSWER 10 OF 70 REGISTRY COPYRIGHT 2004 ACS on STN
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L15 ANSWER 11 OF 70 REGISTRY COPYRIGHT 2004 ACS on STN
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L15 ANSWER 69 OF 70 REGISTRY COPYRIGHT 2004 ACS on STN

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IN   GenBank AI446513 (9CI)

L15  ANSWER 70 OF 70  REGISTRY  COPYRIGHT 2004 ACS on STN
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L17        108 L14 NOT L15  — all non-GenBank records

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L17  ANSWER 1 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   700878-96-2 REGISTRY  - use Registry # to match sequence to citation
CN   INDEX NAME NOT YET ASSIGNED
FS   NUCLEIC ACID SEQUENCE
SQL  20
NA   2 a   4 c   12 g   2 t
NTE  modified
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 type            ------ location ------         description
----------------------------------------------------------------------
modified link    g-1          - g-2          P-thio
modified link    g-2          - t-3          P-thio
modified link    g-15         - g-16         P-thio
modified link    g-16         - g-17         P-thio
modified link    g-17         - g-18         P-thio
modified link    g-18         - g-19         P-thio
modified link    g-19         - g-20         P-thio
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SEQ      1 ggtgcaccgg tgcaggggg
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HITS AT:   3-20

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CAPLUS
DT.CA  CAplus document type:  Patent
RL.P   Roles from patents:  BIOL (Biological study); PRP (Properties); USES
       (Uses)
              1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17  ANSWER 2 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   700878-95-1  REGISTRY
CN   INDEX NAME NOT YET ASSIGNED
FS   NUCLEIC ACID SEQUENCE
SQL  20
NA   3 a   3 c   11 g   3 t
NTE  modified
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----------------------------------------------------------------------
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modified link    g-18         - g-19         P-thio
modified link    g-19         - g-20         P-thio
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SEQ      1 ggtgcatcga tgcaggggg
             ======== ==========
HITS AT:   3-20
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RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 3 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 700878-94-0 REGISTRY
CN INDEX NAME NOT YET ASSIGNED
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 3 a 3 c 11 g 3 t
NTE modified

type	------ location ------		description
modified link	g-1	- g-2	P-thio
modified link	g-2	- t-3	P-thio
modified link	g-15	- g-16	P-thio
modified link	g-16	- g-17	P-thio
modified link	g-17	- g-18	P-thio
modified link	g-18	- g-19	P-thio
modified link	g-19	- g-20	P-thio

SEQ 1 ggtgcatcga tgcaggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 4 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 698754-77-7 REGISTRY
CN DNA, d(G-G-T-G-C-A-C-C-G-G-T-G-C-A-G-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 2 a 4 c 12 g 2 t

SEQ 1 ggtgcaccgg tgcaggggg
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HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 5 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 698754-76-6 REGISTRY
CN DNA, d(G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
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NA 3 a 3 c 11 g 3 t

SEQ 1 ggtgcatcga tgcagggggg
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HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 6 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 698753-95-6 REGISTRY
CN DNA, d(N-N-T-G-C-A-C-C-G-G-T-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
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HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 7 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 698400-54-3 REGISTRY
CN DNA, d(N-N-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
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NA 3 a 3 c 9 g 3 t 2 n

SEQ 1 nntgcatcga tgcagggggg
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HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 8 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 698400-48-5 REGISTRY
CN DNA, d(N-N-T-G-C-G-C-C-G-G-C-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 1 a 5 c 11 g 1 t 2 n

SEQ 1 nntgcgccgg cgcaggggg
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HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 9 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 698400-46-3 REGISTRY
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FS NUCLEIC ACID SEQUENCE
SQL 20
NA 2 a 4 c 10 g 2 t 2 n

SEQ 1 nntgcgtcga cgcaggggg
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HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 10 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 662376-92-3 REGISTRY
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OTHER NAMES:
CN 153: PN: WO2004014322 TABLE: 8 unclaimed sequence
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 3 a 3 c 11 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2004014322 unclaimed TABLE 8

SEQ 1 ggtgcatcga tgcaggggg

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ITS AT:   3-20

*RELATED SEQUENCES AVAILABLE WITH SEQLINK**
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R   CA
C   STN Files:   CA, CAPLUS
T.CA  CAplus document type:  Patent
L.P   Roles from patents:  PRP (Properties)
              1 REFERENCES IN FILE CA (1907 TO DATE)
              1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

17  ANSWER 11 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
N   640803-43-6  REGISTRY
N   DNA, d(G-sp-G-sp-T-G-C-A-T-C-G-A-T-G-C-A-G-G-sp-G-sp-G-sp-G-sp-G) (9CI)
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type            ------ location ------         description
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odified link    g-2         - t-3         P-thio
odified link    g-16        - g-17        P-thio
odified link    g-17        - g-18        P-thio
odified link    g-18        - g-19        P-thio
odified link    g-19        - g-20        P-thio
----------------------------------------------------------------------

EQ      1 ggtgcatcga tgcaggggg
            ======== ==========
ITS AT:   3-20

*RELATED SEQUENCES AVAILABLE WITH SEQLINK**
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I   MAN
R   CA
C   STN Files:   CA, CAPLUS
T.CA  CAplus document type:  Journal
L.NP  Roles from non-patents:  BIOL (Biological study)
              1 REFERENCES IN FILE CA (1907 TO DATE)
              1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

17  ANSWER 12 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
N   637803-30-6  REGISTRY
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S   NUCLEIC ACID SEQUENCE
QL  20
A   3 a   3 c   11 g   3 t

EQ      1 ggtgcatcga tgcaggggg
            ======== ==========
ITS AT:   3-20

*RELATED SEQUENCES AVAILABLE WITH SEQLINK**
F   Unspecified
I   MAN
R   CA
C   STN Files:   CA, CAPLUS, TOXCENTER
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DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: BIOL (Biological study); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 13 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 631926-12-0 REGISTRY
CN DNA, d(G-sp-G[oxy(mercaptophosphinylidene)oxy-1,3-propanediyloxy(mercaptophosphinylidene)oxy]T-C-G-T-G-C[oxy(mercaptophosphinylidene)oxy-1,3-propanediyloxy(mercaptophosphinylidene)oxy]A-T-C-G-A-T[oxy(mercaptophosphinylidene)oxy-1,3-propanediyloxy(mercaptophosphinylidene)oxy]G-C-A-C-G-A[oxy(mercaptophosphinylidene)oxy-1,3-propanediyloxy(mercaptophosphinylidene)oxy]G-G-sp-G-sp-G-sp-G-sp-G) (9CI) (CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
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NA 4 a 5 c 13 g 4 t
NTE modified

type	------ location ------		description
modified link	g-1	- g-2	P-thio
modified link	g-22	- g-23	P-thio
modified link	g-23	- g-24	P-thio
modified link	g-24	- g-25	P-thio
modified link	g-25	- g-26	P-thio
uncommon link	g-2	- t-3	unavailable
uncommon link	c-8	- a-9	unavailable
uncommon link	t-14	- g-15	unavailable
uncommon link	a-20	- g-21	unavailable

SEQ 1 ggtcgtgcat cgatgcacga gggggg
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HITS AT: 6-26

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 14 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 631926-11-9 REGISTRY
CN DNA, d(G-sp-G[oxy(mercaptophosphinylidene)oxy-1,3-propanediyloxy(mercaptophosphinylidene)oxy]T-G-C[oxy(mercaptophosphinylidene)oxy-1,3-propanediyloxy(mercaptophosphinylidene)oxy]A-T-C-G-A-T[oxy(mercaptophosphinylidene)oxy-1,3-propanediyloxy(mercaptophosphinylidene)oxy]G-C-A[oxy(mercaptophosphinylidene)oxy-1,3-propanediyloxy(mercaptophosphinylidene)oxy]G-G-sp-G-sp-G-sp-G-sp-G) (9CI) (CA INDEX NAME)
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NTE modified

type	------ location ------	description

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modified link	g-16	- g-17	P-thio
modified link	g-17	- g-18	P-thio
modified link	g-18	- g-19	P-thio
modified link	g-19	- g-20	P-thio
uncommon link	g-2	- t-3	unavailable
uncommon link	c-5	- a-6	unavailable
uncommon link	t-11	- g-12	unavailable
uncommon link	a-14	- g-15	unavailable

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SEQ      1 ggtgcatcga tgcaggggg
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HITS AT:   3-20

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA  CAplus document type:  Patent
RL.P   Roles from patents:  BIOL (Biological study); PREP (Preparation); PRP
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              1 REFERENCES IN FILE CA (1907 TO DATE)
              1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17  ANSWER 15 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
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     (CA INDEX NAME)
FS   NUCLEIC ACID SEQUENCE
SQL  20
NA   2 a   4 c   12 g   2 t
NTE  modified
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type	location		description
modified link	g-1	- g-2	P-thio
modified link	g-2	- t-3	P-thio
modified link	g-16	- g-17	P-thio
modified link	g-17	- g-18	P-thio
modified link	g-18	- g-19	P-thio
modified link	g-19	- g-20	P-thio

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SEQ      1 ggtgcaccgg tgcaggggg
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HITS AT:   3-20

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS
DT.CA  CAplus document type:  Journal
RL.NP  Roles from non-patents:  BIOL (Biological study); USES (Uses)
              1 REFERENCES IN FILE CA (1907 TO DATE)
              1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17  ANSWER 16 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   573722-82-4  REGISTRY
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CN DNA, d(G-sp-G-sp-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-sp-G) (9CI) (CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 3 a 3 c 11 g 3 t
NTE modified

type	------ location ------		description
modified link	g-1	- g-2	P-thio
modified link	g-2	- t-3	P-thio
modified link	g-19	- g-20	P-thio

SEQ 1 ggtgcatcga tgcaggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: BIOL (Biological study); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 17 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 573722-80-2 REGISTRY
CN DNA, d(G-sp-G-sp-T-G-C-A-T-C-G-A-T-G-C-A-G-G-sp-G-sp-G-sp-G-sp-G) (9CI) (CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 3 a 3 c 11 g 3 t
NTE modified

type	------ location ------		description
modified link	g-1	- g-2	P-thio
modified link	g-2	- t-3	P-thio
modified link	g-16	- g-17	P-thio
modified link	g-17	- g-18	P-thio
modified link	g-18	- g-19	P-thio
modified link	g-19	- g-20	P-thio

SEQ 1 ggtgcatcga tgcaggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: BIOL (Biological study); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 18 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN

RN 569431-26-1 REGISTRY
CN DNA, d(G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 53: PN: US20030144229 SEQID: 53 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL **19**
NA 3 a 3 c 10 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US2003144229 unclaimed SEQID 53

SEQ 1 ggtgcatcga tgcaggggg
========= =========
HITS AT: 3-19

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 19 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 569431-16-9 REGISTRY
CN DNA, d(G-G-T-G-C-A-C-C-G-G-T-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 42: PN: US20030144229 SEQID: 42 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 2 a 4 c 12 g 2 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US2003144229 unclaimed SEQID 42

SEQ 1 ggtgcaccgg tgcagggggg
========= ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 20 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 569431-14-7 REGISTRY
CN DNA, d(G-G-T-G-C-G-T-C-G-A-C-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 39: PN: US20030144229 SEQID: 39 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 2 a 4 c 12 g 2 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US2003144229 unclaimed SEQID 39

SEQ 1 ggtgcgtcga cgcaggggg
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 21 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 569431-10-3 REGISTRY
CN DNA, d(G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 32: PN: US20030144229 SEQID: 32 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 3 a 3 c 11 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US2003144229 unclaimed SEQID 32

SEQ 1 ggtgcatcga tgcaggggg
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 22 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 552439-63-1 REGISTRY
CN DNA, d(G-G-T-G-G-A-T-C-G-A-T-C-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 24: PN: WO03054161 SEQID: 26 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 3 a 3 c 11 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003054161 unclaimed SEQID 26

SEQ 1 ggtggatcga tccaggggg
========= ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 23 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 552439-62-0 REGISTRY
CN DNA, d(G-G-T-A-T-A-T-C-G-A-T-A-T-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 23: PN: WO03054161 SEQID: 25 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 5 a 1 c 9 g 5 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003054161 unclaimed SEQID 25

SEQ 1 ggtatatcga tatagggggg
========= ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 24 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 552439-61-9 REGISTRY
CN DNA, d(C-C-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 22: PN: WO03054161 SEQID: 24 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 3 a 5 c 9 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003054161 unclaimed SEQID 24

SEQ 1 cctgcatcga tgcaggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 25 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 552439-56-2 REGISTRY
CN DNA, d(G-G-T-G-C-G-T-C-G-A-C-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 17: PN: WO03054161 SEQID: 19 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 2 a 4 c 12 g 2 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003054161 unclaimed SEQID 19

SEQ 1 ggtgcgtcga cgcaggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN

SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 26 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 552439-53-9 REGISTRY
CN DNA, d(T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 14: PN: WO03054161 SEQID: 16 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL **18**
NA 3 a 3 c 9 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003054161 unclaimed SEQID 16

SEQ 1 tgcatcgatg caggggggg
========== ========
HITS AT: 1-18

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 27 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 552439-50-6 REGISTRY
CN DNA, d(G-G-T-G-C-A-C-C-G-G-T-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 11: PN: WO03054161 SEQID: 13 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 2 a 4 c 12 g 2 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003054161 unclaimed SEQID 13

SEQ 1 ggtgcaccgg tgcaggggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 28 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 552439-49-3 REGISTRY
CN DNA, d(G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 10: PN: WO03054161 SEQID: 12 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 3 a 3 c 11 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003054161 unclaimed SEQID 12

SEQ 1 ggtgcatcga tgcaggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 29 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 537058-59-6 REGISTRY
CN DNA, d(G-sp-G-sp-T-G-C-A-T-C-G-A-T-G-C-A-G-G-sp-G-sp-G-sp-G-sp-G) (9CI) (CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 3 a 3 c 11 g 3 t
NTE modified

type	location		description
modified link	g-1	- g-2	P-thio
modified link	g-2	- t-3	P-thio
modified link	g-16	- g-17	P-thio
modified link	g-17	- g-18	P-thio
modified link	g-18	- g-19	P-thio
modified link	g-19	- g-20	P-thio

SEQ 1 ggtgcatcga tgcaggggg
======== ==========

HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: BIOL (Biological study)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 30 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 537058-58-5 REGISTRY
CN DNA, d(G-sp-G-sp-T-G-C-A-C-C-G-G-T-G-C-A-G-G-sp-G-sp-G-sp-G-sp-G) (9CI)
(CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 2 a 4 c 12 g 2 t
NTE modified

type	------ location ------		description
modified link	g-1	- g-2	P-thio
modified link	g-2	- t-3	P-thio
modified link	g-16	- g-17	P-thio
modified link	g-17	- g-18	P-thio
modified link	g-18	- g-19	P-thio
modified link	g-19	- g-20	P-thio

SEQ 1 ggtgcaccgg tgcaggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: BIOL (Biological study)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 31 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 534784-78-6 REGISTRY
CN DNA, d(G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2: PN: WO03043588 SEQID: 2 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 3 a 3 c 11 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003043588 unclaimed SEQID 2

```
SEQ      1 ggtgcatcga tgcaggggg
             ======== ==========
HITS AT:   3-20

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER
DT.CA  CAplus document type:  Patent
RL.P   Roles from patents:  PRP (Properties)
               1 REFERENCES IN FILE CA (1907 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17  ANSWER 32 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   524986-12-7  REGISTRY
CN   DNA, d(G-G-T-G-G-A-T-C-G-A-T-C-C-A-G-G-G-G-G-G) (9CI)   (CA INDEX NAME)
OTHER NAMES:
CN   89: PN: WO03040308 SEQID: 89 unclaimed DNA
FS   NUCLEIC ACID SEQUENCE
SQL  20
NA   3 a   3 c   11 g   3 t

PATENT ANNOTATIONS (PNTE):
Sequence |Patent
Source   |Reference
=========+============
Not Given|WO2003040308
         |unclaimed
         |SEQID 89


SEQ      1 ggtggatcga tccaggggg
             ======== ==========
HITS AT:   3-20

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER
DT.CA  CAplus document type:  Patent
RL.P   Roles from patents:  PRP (Properties)
               1 REFERENCES IN FILE CA (1907 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17  ANSWER 33 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   524986-11-6  REGISTRY
CN   DNA, d(G-G-T-A-T-A-T-C-G-A-T-A-T-A-G-G-G-G-G-G) (9CI)   (CA INDEX NAME)
OTHER NAMES:
CN   88: PN: WO03040308 SEQID: 88 unclaimed DNA
FS   NUCLEIC ACID SEQUENCE
SQL  20
NA   5 a   1 c   9 g   5 t

PATENT ANNOTATIONS (PNTE):
Sequence |Patent
Source   |Reference
=========+============
Not Given|WO2003040308
         |unclaimed
```

|SEQID 88

SEQ 1 ggtatatcga tatagggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 34 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 524986-00-3 REGISTRY
CN DNA, d(G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G-T-G-C-A-G-G-C-T-T-C-T-C)
(9CI) (CA INDEX NAME)
OTHER NAMES:
CN 77: PN: WO03040308 SEQID: 77 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 32
NA 4 a 7 c 14 g 7 t

PATENT ANNOTATIONS (PNTE):
Sequence |Patent
Source |Reference
=========+=============
Not Given|WO2003040308
|unclaimed
|SEQID 77

SEQ 1 ggtgcatcga tgcaggggg tgcaggcttc tc
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 35 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 524985-99-7 REGISTRY
CN DNA, d(T-C-G-A-G-C-G-T-T-C-T-C-G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G)
(9CI) (CA INDEX NAME)
OTHER NAMES:
CN 76: PN: WO03040308 SEQID: 76 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 32
NA 4 a 7 c 14 g 7 t

PATENT ANNOTATIONS (PNTE):
Sequence |Patent

Source	Reference
Not Given	WO2003040308
	unclaimed
	SEQID 76

SEQ 1 tcgagcgttc tcggtgcatc gatgcagggg gg
HITS AT: 15-32

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 36 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 524985-98-6 REGISTRY
CN DNA, d(G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G-G-T-C-G-A-G-C-G-T-T-C-T-C) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 75: PN: WO03040308 SEQID: 75 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 32
NA 4 a 7 c 14 g 7 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003040308
	unclaimed
	SEQID 75

SEQ 1 ggtgcatcga tgcaggggg tcgagcgttc tc
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 37 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 524985-93-1 REGISTRY
CN DNA, d(G-G-T-G-C-G-T-C-G-A-C-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 67: PN: WO03040308 SEQID: 67 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 2 a 4 c 12 g 2 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003040308 unclaimed SEQID 67

SEQ 1 ggtgcgtcga cgcaggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 38 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 524985-91-9 REGISTRY
CN DNA, d(G-G-T-G-C-A-C-C-G-G-T-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 65: PN: WO03040308 SEQID: 65 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 2 a 4 c 12 g 2 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003040308 unclaimed SEQID 65

SEQ 1 ggtgcaccgg tgcaggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 39 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 524985-88-4 REGISTRY
CN DNA, d(G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 61: PN: WO03040308 SEQID: 61 unclaimed DNA
FS NUCLEIC ACID SEQUENCE

SQL 20
NA 3 a 3 c 11 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003040308
	unclaimed
	SEQID 61

SEQ 1 ggtgcatcga tgcaggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 40 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 524084-27-3 REGISTRY
CN DNA, d(G-G-G-G-T-C-G-A-C-G-T-C-G-A-C-G-T-C-G-A-G-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 420: PN: US20030087848 SEQID: 1077 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 27
NA 3 a 5 c 16 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US2003087848
	unclaimed
	SEQID 1077

SEQ 1 ggggtcgacg tcgacgtcga ggggggg
========== ========== =======
HITS AT: 1-27

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 41 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 503576-65-6 REGISTRY
CN DNA, d(G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G) (9CI) (CA INDEX NAME)

OTHER NAMES:
CN 33: PN: US20030060440 FIGURE: 1 unclaimed sequence
FS NUCLEIC ACID SEQUENCE
SQL **18**
NA 3 a 3 c 9 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US2003060440 unclaimed FIGURE 1

SEQ 1 ggtgcatcga tgcagggg
========= ========
HITS AT: 3-18
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 42 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 503576-64-5 REGISTRY
CN DNA, d(A-A-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 31: PN: US20030060440 FIGURE: 1 unclaimed sequence
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 5 a 3 c 9 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US2003060440 unclaimed FIGURE 1

SEQ 1 aatgcatcga tgcaggggg
========= ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 43 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 503576-63-4 REGISTRY
CN DNA, d(G-G-G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)

OTHER NAMES:
CN 21: PN: US20030060440 FIGURE: 1 unclaimed sequence
FS NUCLEIC ACID SEQUENCE
SQL 22
NA 3 a 3 c 13 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US2003060440 unclaimed FIGURE 1

SEQ 1 ggggtgcatc gatgcagggg gg
====== ========== ==
HITS AT: 5-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 44 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 503575-94-8 REGISTRY
CN DNA, d(G-G-T-G-G-A-T-C-G-A-T-C-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 111: PN: US20030060440 SEQID: 40 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 3 a 3 c 11 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US2003060440 unclaimed SEQID 40

SEQ 1 ggtggatcga tccaggggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 45 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN

RN 503575-93-7 REGISTRY
CN DNA, d(G-G-T-A-T-A-T-C-G-A-T-A-T-A-G-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 110: PN: US20030060440 SEQID: 39 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 5 a 1 c 9 g 5 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US2003060440 unclaimed SEQID 39

SEQ 1 ggtatatcga tatagggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 46 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 503575-92-6 REGISTRY
CN DNA, d(C-C-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 109: PN: US20030060440 SEQID: 38 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 3 a 5 c 9 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US2003060440 unclaimed SEQID 38

SEQ 1 cctgcatcga tgcaggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 47 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 503575-76-6 REGISTRY
CN DNA, d(T-G-C-G-T-C-G-A-C-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 85: PN: US20030060440 SEQID: 14 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL **18**
NA 2 a 4 c 10 g 2 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US2003060440 unclaimed SEQID 14

SEQ 1 tgcgtcgacg caggggggg
========== ========
HITS AT: 1-18
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 48 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 503572-73-4 REGISTRY
CN DNA, d(G-G-T-G-C-G-T-C-G-A-C-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 102: PN: US20030060440 SEQID: 31 claimed DNA
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 2 a 4 c 12 g 2 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US2003060440 claimed SEQID 31

SEQ 1 ggtgcgtcga cgcaggggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 49 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 503572-69-8 REGISTRY
CN DNA, d(T-G-C-G-C-C-G-G-C-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 88: PN: US20030060440 SEQID: 17 claimed DNA
FS NUCLEIC ACID SEQUENCE
SQL **18**
NA 1 a 5 c 11 g 1 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US2003060440 claimed SEQID 17

SEQ 1 tgcgccggcg cagggggg
========== ========
HITS AT: 1-18
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 50 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 503572-66-5 REGISTRY
CN DNA, d(T-G-C-A-C-C-G-G-T-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 84: PN: US20030060440 SEQID: 13 claimed DNA
FS NUCLEIC ACID SEQUENCE
SQL **18**
NA 2 a 4 c 10 g 2 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US2003060440 claimed SEQID 13

SEQ 1 tgcaccggtg cagggggg
========== ========
HITS AT: 1-18
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 51 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 503572-65-4 REGISTRY
CN DNA, d(T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 83: PN: US20030060440 SEQID: 12 claimed DNA
FS NUCLEIC ACID SEQUENCE
SQL **18**
NA 3 a 3 c 9 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US2003060440 claimed SEQID 12

SEQ 1 tgcatcgatg cagggggg
========== ========
HITS AT: 1-18

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 52 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 503572-63-2 REGISTRY
CN DNA, d(G-G-T-G-C-A-C-C-G-G-T-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 73: PN: US20030060440 SEQID: 2 claimed DNA
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 2 a 4 c 12 g 2 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US2003060440 claimed SEQID 2

SEQ 1 ggtgcaccgg tgcaggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 53 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 503572-62-1 REGISTRY
CN DNA, d(G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 72: PN: US20030060440 SEQID: 1 claimed DNA
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 3 a 3 c 11 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US2003060440 claimed SEQID 1

SEQ 1 ggtgcatcga tgcaggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 54 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 501983-30-8 REGISTRY
CN DNA, d(G-G-G-G-T-C-G-A-C-G-T-C-G-A-C-G-T-C-G-A-G-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 479: PN: US20030050268 SEQID: 1021 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL **27**
NA 3 a 5 c 16 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US2003050268 unclaimed SEQID 1021

SEQ 1 ggggtcgacg tcgacgtcga ggggggg
========== ========== =======
HITS AT: 1-27

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 55 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 501834-44-2 REGISTRY
CN DNA, d(G-G-T-G-G-A-T-C-G-A-T-C-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 43: PN: WO03020884 SEQID: 43 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 3 a 3 c 11 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003020884 unclaimed SEQID 43

SEQ 1 ggtggatcga tccaggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 56 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 501834-43-1 REGISTRY
CN DNA, d(G-G-T-A-T-A-T-C-G-A-T-A-T-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 42: PN: WO03020884 SEQID: 42 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 5 a 1 c 9 g 5 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003020884 unclaimed SEQID 42

SEQ 1 ggtatatcga tataggggg
======== ==========

HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 57 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 501834-32-8 REGISTRY
CN DNA, d(G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G-T-G-C-A-G-G-C-T-T-C-T-C)
(9CI) (CA INDEX NAME)
OTHER NAMES:
CN 31: PN: WO03020884 SEQID: 31 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 32
NA 4 a 7 c 14 g 7 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003020884 unclaimed SEQID 31

SEQ 1 ggtgcatcga tgcaggggg tgcaggcttc tc

HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 58 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 501834-31-7 REGISTRY
CN DNA, d(T-C-G-A-G-C-G-T-T-C-T-C-G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G)
(9CI) (CA INDEX NAME)
OTHER NAMES:
CN 30: PN: WO03020884 SEQID: 30 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 32
NA 4 a 7 c 14 g 7 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003020884 unclaimed SEQID 30

```
SEQ      1 tcgagcgttc tcggtgcatc gatgcagggg gg
                     ====== ========== ==
HITS AT:   15-32

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS
DT.CA  CAplus document type:  Patent
RL.P   Roles from patents:  PRP (Properties)
               1 REFERENCES IN FILE CA (1907 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17  ANSWER 59 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   501834-30-6  REGISTRY
CN   DNA, d(G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G-T-C-G-A-G-C-G-T-T-C-T-C)
     (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   29: PN: WO03020884 SEQID: 29 unclaimed DNA
FS   NUCLEIC ACID SEQUENCE
SQL  32
NA   4 a   7 c   14 g   7 t

PATENT ANNOTATIONS (PNTE):
Sequence |Patent
Source   |Reference
=========+============
Not Given|WO2003020884
         |unclaimed
         |SEQID 29


SEQ      1 ggtgcatcga tgcaggggg tcgagcgttc tc
             ======== ==========
HITS AT:   3-20

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS
DT.CA  CAplus document type:  Patent
RL.P   Roles from patents:  PRP (Properties)
               1 REFERENCES IN FILE CA (1907 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17  ANSWER 60 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   501834-25-9  REGISTRY
CN   DNA, d(G-G-T-G-C-G-T-C-G-A-C-G-C-A-G-G-G-G-G-G) (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   21: PN: WO03020884 SEQID: 21 unclaimed DNA
FS   NUCLEIC ACID SEQUENCE
SQL  20
NA   2 a   4 c   12 g   2 t

PATENT ANNOTATIONS (PNTE):
Sequence |Patent
Source   |Reference
=========+============
```

Not Given	WO2003020884
	unclaimed
	SEQID 21

SEQ 1 ggtgcgtcga cgcaggggg
========= ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 61 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 501834-16-8 REGISTRY
CN DNA, d(N-N-T-G-C-G-C-C-G-G-C-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 8: PN: WO03020884 SEQID: 8 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 1 a 5 c 11 g 1 t 2 n

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003020884
	unclaimed
	SEQID 8

SEQ 1 nntgcgccgg cgcaggggg
========= ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 62 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 501834-15-7 REGISTRY
CN DNA, d(N-N-T-G-C-G-T-C-G-A-C-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 7: PN: WO03020884 SEQID: 7 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 2 a 4 c 10 g 2 t 2 n

PATENT ANNOTATIONS (PNTE):

Sequence	Patent

Source	Reference
Not Given	WO2003020884
	unclaimed
	SEQID 7

SEQ 1 nntgcgtcga cgcaggggg
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 63 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 501834-14-6 REGISTRY
CN DNA, d(N-N-T-G-C-A-C-C-G-G-T-G-C-A-G-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 6: PN: WO03020884 SEQID: 6 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 2 a 4 c 10 g 2 t 2 n

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003020884
	unclaimed
	SEQID 6

SEQ 1 nntgcaccgg tgcaggggg
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 64 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 501834-13-5 REGISTRY
CN DNA, d(N-N-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 5: PN: WO03020884 SEQID: 5 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 3 a 3 c 9 g 3 t 2 n

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003020884 unclaimed SEQID 5

SEQ 1 nntgcatcga tgcaggggg
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 65 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 501729-68-6 REGISTRY
CN DNA, d(G-G-T-G-C-A-C-C-G-G-T-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2: PN: WO03020884 SEQID: 2 claimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 2 a 4 c 12 g 2 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003020884 claimed SEQID 2

SEQ 1 ggtgcaccgg tgcaggggg
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 66 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 501729-67-5 REGISTRY
CN DNA, d(G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1: PN: WO03020884 SEQID: 1 claimed DNA
FS NUCLEIC ACID SEQUENCE

SQL 20
NA 3 a 3 c 11 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003020884 claimed SEQID 1

SEQ 1 ggtgcatcga tgcaggggg
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 67 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 500239-90-7 REGISTRY
CN DNA, d(G-G-G-G-T-C-G-A-C-G-T-C-G-A-C-G-T-C-G-A-G-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 55: PN: WO03015711 SEQID: 56 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 27
NA 3 a 5 c 16 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003015711 unclaimed SEQID 56

SEQ 1 ggggtcgacg tcgacgtcga ggggggg
HITS AT: 1-27

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 68 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 482663-89-8 REGISTRY

CN DNA, d(G-sp-G[oxy(mercaptophosphinylidene)oxy-1,3-propanediyloxyphosphinicooxy]T-C-G-T-G-C[oxyphosphinicooxy-1,3-propanediyloxyphosphinicooxy]A-T-C-G-A-T[oxyphosphinicooxy-1,3-propanediyloxyphosphinicooxy]G-C-A-C-G-A[oxyphosphinicooxy-1,3-propanediyloxyphosphinicooxy]G-G-sp-G-sp-G-sp-G-sp-G) (9CI) (CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
SQL **26**
NA 4 a 5 c 13 g 4 t
NTE modified

type	location			description
modified link	g-1	-	g-2	P-thio
modified link	g-22	-	g-23	P-thio
modified link	g-23	-	g-24	P-thio
modified link	g-24	-	g-25	P-thio
modified link	g-25	-	g-26	P-thio
uncommon link	g-2	-	t-3	unavailable
uncommon link	c-8	-	a-9	unavailable
uncommon link	t-14	-	g-15	unavailable
uncommon link	a-20	-	g-21	unavailable

SEQ 1 ggtcgtgcat cgatgcacga gggggg
=====
HITS AT: 6-26

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 69 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 482663-88-7 REGISTRY
CN DNA, d(G-sp-G[oxy(mercaptophosphinylidene)oxy-1,3-propanediyloxyphosphinicooxy]T-G-C[oxyphosphinicooxy-1,3-propanediyloxyphosphinicooxy]A-T-C-G-A-T[oxyphosphinicooxy-1,3-propanediyloxyphosphinicooxy]G-C-A[oxyphosphinicooxy-1,3-propanediyloxyphosphinicooxy]G-G-sp-G-sp-G-sp-G-sp-G) (9CI) (CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 3 a 3 c 11 g 3 t
NTE modified

type	location			description
modified link	g-1	-	g-2	P-thio
modified link	g-16	-	g-17	P-thio
modified link	g-17	-	g-18	P-thio
modified link	g-18	-	g-19	P-thio
modified link	g-19	-	g-20	P-thio
uncommon link	g-2	-	t-3	unavailable
uncommon link	c-5	-	a-6	unavailable
uncommon link	t-11	-	g-12	unavailable

```
uncommon link    a-14          - g-15          unavailable
-----------------------------------------------------------------------

SEQ      1 ggtgcatcga tgcaggggg
           ======== ==========
HITS AT:   3-20

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA  CAplus document type:  Patent
RL.P   Roles from patents:  BIOL (Biological study); PREP (Preparation); PRP
       (Properties); USES (Uses)
              1 REFERENCES IN FILE CA (1907 TO DATE)
              1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17  ANSWER 70 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   459471-17-1  REGISTRY
CN   DNA, d(G-sp-G-sp-T-G-C-A-T-C-G-A-T-G-C-A-G-sp-G-sp-G-sp-G-sp-G-sp-G) (9CI)
     (CA INDEX NAME)
FS   NUCLEIC ACID SEQUENCE
SQL  20
NA   3 a   3 c   11 g   3 t
NTE  modified
-----------------------------------------------------------------------
 type            ------ location ------         description
-----------------------------------------------------------------------
modified link    g-1          - g-2          P-thio
modified link    g-2          - t-3          P-thio
modified link    g-15         - g-16         P-thio
modified link    g-16         - g-17         P-thio
modified link    g-17         - g-18         P-thio
modified link    g-18         - g-19         P-thio
modified link    g-19         - g-20         P-thio
-----------------------------------------------------------------------

SEQ      1 ggtgcatcga tgcaggggg
           ======== ==========
HITS AT:   3-20

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS
DT.CA  CAplus document type:  Journal
RL.NP  Roles from non-patents:  BIOL (Biological study); PRP (Properties)
              1 REFERENCES IN FILE CA (1907 TO DATE)
              1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17  ANSWER 71 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   459471-16-0  REGISTRY
CN   DNA, d(G-sp-G-sp-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-sp-G-sp-G) (9CI)  (CA
     INDEX NAME)
FS   NUCLEIC ACID SEQUENCE
SQL  20
NA   3 a   3 c   11 g   3 t
NTE  modified
-----------------------------------------------------------------------
 type            ------ location ------         description
```

```
----------------------------------------------------------------------
modified link    g-1         - g-2         P-thio
modified link    g-2         - t-3         P-thio
modified link    g-18        - g-19        P-thio
modified link    g-19        - g-20        P-thio
----------------------------------------------------------------------

SEQ      1 ggtgcatcga tgcaggggg
             ======== ==========
HITS AT:   3-20

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS
DT.CA  CAplus document type:  Journal
RL.NP  Roles from non-patents:  BIOL (Biological study); PRP (Properties)
               1 REFERENCES IN FILE CA (1907 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17  ANSWER 72 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   441364-86-9  REGISTRY
CN   DNA, d(G-G-G-G-T-C-G-A-C-G-T-C-G-A-C-G-T-C-G-A-G-G-G-G-G-G-G) (9CI)  (CA
     INDEX NAME)
OTHER NAMES:
CN   653: PN: WO02053141 SEQID: 1077 claimed DNA
FS   NUCLEIC ACID SEQUENCE
SQL  27
NA   3 a   5 c   16 g   3 t

PATENT ANNOTATIONS (PNTE):
Sequence |Patent
Source   |Reference
=========+============
Not Given|WO2002053141
         |claimed
         |SEQID 1077


SEQ      1 ggggtcgacg tcgacgtcga ggggggg
           ========== ========== =======
HITS AT:   1-27

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA  CAplus document type:  Patent
RLD.P  Roles for non-specific derivatives from patents:  BIOL (Biological
       study); PRP (Properties); USES (Uses)
               1 REFERENCES IN FILE CA (1907 TO DATE)
               1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
               1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17  ANSWER 73 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   434529-77-8  REGISTRY
CN   DNA, d(G-sp-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-sp-G) (9CI)  (CA INDEX
     NAME)
FS   NUCLEIC ACID SEQUENCE
SQL  20
```

```
NA   3 a   3 c   11 g   3 t
NTE  modified
-----------------------------------------------------------------------
 type            ------ location ------         description
-----------------------------------------------------------------------
modified link    g-1          - g-2          P-thio
modified link    g-19         - g-20         P-thio
-----------------------------------------------------------------------

SEQ      1 ggtgcatcga tgcaggggg
           ======== ==========
HITS AT:   3-20

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER
DT.CA  CAplus document type:  Journal
RL.NP  Roles from non-patents:  BIOL (Biological study)
               1 REFERENCES IN FILE CA (1907 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17  ANSWER 74 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   406966-35-6  REGISTRY
CN   DNA, d(G-sp-G-sp-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-sp-G-sp-G)  (9CI)  (CA
     INDEX NAME)
FS   NUCLEIC ACID SEQUENCE
SQL  20
NA   3 a   3 c   11 g   3 t
NTE  modified
-----------------------------------------------------------------------
 type            ------ location ------         description
-----------------------------------------------------------------------
modified link    g-1          - g-2          P-thio
modified link    g-2          - t-3          P-thio
modified link    g-18         - g-19         P-thio
modified link    g-19         - g-20         P-thio
-----------------------------------------------------------------------

SEQ      1 ggtgcatcga tgcaggggg
           ======== ==========
HITS AT:   3-20

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS
DT.CA  CAplus document type:  Journal
RL.NP  Roles from non-patents:  BIOL (Biological study); PRP (Properties); USES
       (Uses)
               1 REFERENCES IN FILE CA (1907 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17  ANSWER 75 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   406966-34-5  REGISTRY
CN   DNA, d(G-sp-G-sp-T-G-C-A-C-C-G-G-T-G-C-A-G-G-sp-G-sp-G-sp-G-sp-G)  (9CI)
     (CA INDEX NAME)
FS   NUCLEIC ACID SEQUENCE
SQL  20
NA   2 a   4 c   12 g   2 t
```

```
NTE  modified
-----------------------------------------------------------------
 type            ------ location ------        description
-----------------------------------------------------------------
modified link    g-1          - g-2         P-thio
modified link    g-2          - t-3         P-thio
modified link    g-16         - g-17        P-thio
modified link    g-17         - g-18        P-thio
modified link    g-18         - g-19        P-thio
modified link    g-19         - g-20        P-thio
-----------------------------------------------------------------

SEQ      1 ggtgcaccgg tgcaggggg
             ======== ==========
HITS AT:   3-20

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS
DT.CA  CAplus document type:  Journal
RL.NP  Roles from non-patents:  BIOL (Biological study); PRP (Properties); USES
       (Uses)
              1 REFERENCES IN FILE CA (1907 TO DATE)
              1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17  ANSWER 76 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   400186-59-6  REGISTRY
CN   DNA, d(G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G) (9CI)   (CA INDEX NAME)
OTHER NAMES:
CN   71: PN: WO0211761 PAGE: 8 claimed sequence
FS   NUCLEIC ACID SEQUENCE
SQL  19
NA   3 a   3 c   10 g   3 t

PATENT ANNOTATIONS (PNTE):
Sequence |Patent
Source   |Reference
=========+============
Not Given|WO2002011761
         |claimed PAGE
         |8


SEQ      1 ggtgcatcga tgcaggggg
             ======== =========
HITS AT:   3-19

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS
DT.CA  CAplus document type:  Patent
RL.P   Roles from patents:  BIOL (Biological study); PRP (Properties); USES
       (Uses)
              1 REFERENCES IN FILE CA (1907 TO DATE)
              1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17  ANSWER 77 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   400186-49-4  REGISTRY
```

CN DNA, d(G-G-T-G-C-A-C-C-G-G-T-G-C-A-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 60: PN: WO0211761 PAGE: 8 claimed sequence
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 2 a 4 c 12 g 2 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2002011761 claimed PAGE 8

SEQ 1 ggtgcaccgg tgcaggggg
========= ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 78 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 400186-47-2 REGISTRY
CN DNA, d(G-G-T-G-C-G-T-C-G-A-C-G-C-A-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 57: PN: WO0211761 PAGE: 8 claimed sequence
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 2 a 4 c 12 g 2 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2002011761 claimed PAGE 8

SEQ 1 ggtgcgtcga cgcaggggg
========= ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 79 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 400186-43-8 REGISTRY
CN DNA, d(G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 50: PN: WO0211761 PAGE: 8 claimed DNA
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 3 a 3 c 11 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2002011761 claimed PAGE 8

SEQ 1 ggtgcatcga tgcaggggg
========= ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 80 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 381261-19-4 REGISTRY
CN DNA, d(U-A-U-A-U-A-U-C-C-C-C-C-C-G-G-T-G-C-A-C-C-G-G-T-G-C-A-G-G-G-G-G-G-A-U-A-U-A-U-A) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 522: PN: WO0193902 SEQID: 548 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL **40**
NA 9 a 10 c 12 g 2 t 7 u

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2001093902 unclaimed SEQID 548

SEQ 1 uauauauccc cccggtgcac cggtgcaggg gggauauaua
===== ========== ===
HITS AT: 16-33
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent

RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 81 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 381261-17-2 REGISTRY
CN DNA, d(A-A-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 520: PN: WO0193902 SEQID: 546 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 5 a 3 c 9 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2001093902 unclaimed SEQID 546

SEQ 1 aatgcatcga tgcaggggg

HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 82 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 381261-08-1 REGISTRY
CN DNA, d(U-C-A-A-C-G-U-U-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 510: PN: WO0193902 SEQID: 536 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 26
NA 5 a 5 c 10 g 3 t 3 u

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2001093902 unclaimed SEQID 536

SEQ 1 ucaacguutg catcgatgca gggggg

HITS AT: 9-26
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 83 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 381261-07-0 REGISTRY
CN DNA, d(U-C-A-A-C-G-U-U-A-A-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 509: PN: WO0193902 SEQID: 535 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 28
NA 7 a 5 c 10 g 3 t 3 u

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2001093902 unclaimed SEQID 535

SEQ 1 ucaacguuaa tgcatcgatg caggggggg
========== ========
HITS AT: 11-28
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 84 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 381261-06-9 REGISTRY
CN DNA, d(U-C-A-A-C-G-U-U-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 508: PN: WO0193902 SEQID: 534 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 25
NA 5 a 5 c 9 g 3 t 3 u

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2001093902 unclaimed SEQID 534

SEQ 1 ucaacguutg catcgatgca ggggg
== ========== =====
HITS AT: 9-25
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 85 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 381261-05-8 REGISTRY
CN DNA, d(U-C-A-A-C-G-U-U-G-G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 507: PN: WO0193902 SEQID: 533 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 29
NA 5 a 5 c 13 g 3 t 3 u

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2001093902 unclaimed SEQID 533

SEQ 1 ucaacguugg gtgcatcgat gcagggggg
========= =========
HITS AT: 12-29
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 86 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 381261-01-4 REGISTRY
CN DNA, d(U-C-A-A-C-G-U-U-G-G-T-G-C-A-C-C-G-G-T-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 503: PN: WO0193902 SEQID: 529 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 28
NA 4 a 6 c 13 g 2 t 3 u

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2001093902 unclaimed SEQID 529

SEQ 1 ucaacguugg tgcaccggtg caggggggg
========== ========
HITS AT: 11-28
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 87 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 381260-99-7 REGISTRY
CN DNA, d(U-C-A-A-C-G-U-U-G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 501: PN: WO0193902 SEQID: 527 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL **28**
NA 5 a 5 c 12 g 3 t 3 u

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2001093902 unclaimed SEQID 527

SEQ 1 ucaacguugg tgcatcgatg caggggggg
========== ========
HITS AT: 11-28
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 88 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 381260-42-0 REGISTRY
CN DNA, d(G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G-U-C-G-A-G-C-G-U-U-C-U-C) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 437: PN: WO0193902 SEQID: 463 unclaimed DNA
FS NUCLEIC ACID SEQUENCE
SQL **32**
NA 4 a 7 c 14 g 3 t 4 u

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2001093902 unclaimed SEQID 463

SEQ 1 ggtgcatcga tgcaggggggg ucgagcguuc uc
======== ==========
HITS AT: 3-20
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 89 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 366065-16-9 REGISTRY
CN DNA, d(G-sp-G-sp-T-G-C-A-T-C-G-A-T-G-C-A-G-sp-G-sp-G-sp-G-sp-G-sp-G) (9CI) (CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 3 a 3 c 11 g 3 t
NTE modified

type	------ location ------		description
modified link	g-1	- g-2	P-thio
modified link	g-2	- t-3	P-thio
modified link	g-16	- g-17	P-thio
modified link	g-17	- g-18	P-thio
modified link	g-18	- g-19	P-thio
modified link	g-19	- g-20	P-thio

SEQ 1 ggtgcatcga tgcaggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 90 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 350271-18-0 REGISTRY
CN DNA, d(G-sp-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-sp-G) (9CI) (CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
SQL **19**
NA 3 a 3 c 10 g 3 t
NTE

type	------ location ------		description
modified link	g-1	- g-2	P-thio
modified link	g-18	- g-19	P-thio

SEQ 1 ggtgcatcga tgcagggg
======== =========
HITS AT: 3-19

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

```
DT.CA  CAplus document type:  Patent
RL.P   Roles from patents:  BIOL (Biological study); PRP (Properties); USES
       (Uses)
              1 REFERENCES IN FILE CA (1907 TO DATE)
              1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17  ANSWER 91 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   350271-08-8  REGISTRY
CN   DNA, d(G-sp-G-T-G-C-A-C-C-G-G-T-G-C-A-G-G-G-G-G-sp-G)  (9CI)  (CA INDEX
     NAME)
FS   NUCLEIC ACID SEQUENCE
SQL  20
NA   2 a   4 c   12 g   2 t
NTE
----------------------------------------------------------------------
 type            ------ location ------         description
----------------------------------------------------------------------
modified link    g-1         - g-2         P-thio
modified link    g-19        - g-20        P-thio
----------------------------------------------------------------------

SEQ      1 ggtgcaccgg tgcaggggg
           ======== ==========
HITS AT:   3-20

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER
DT.CA  CAplus document type:  Patent
RL.P   Roles from patents:  BIOL (Biological study); PRP (Properties); USES
       (Uses)
              1 REFERENCES IN FILE CA (1907 TO DATE)
              1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17  ANSWER 92 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   350271-06-6  REGISTRY
CN   DNA, d(G-sp-G-T-G-C-G-T-C-G-A-C-G-C-A-G-G-G-G-G-sp-G)  (9CI)  (CA INDEX
     NAME)
FS   NUCLEIC ACID SEQUENCE
SQL  20
NA   2 a   4 c   12 g   2 t
NTE
----------------------------------------------------------------------
 type            ------ location ------         description
----------------------------------------------------------------------
modified link    g-1         - g-2         P-thio
modified link    g-19        - g-20        P-thio
----------------------------------------------------------------------

SEQ      1 ggtgcgtcga cgcaggggg
           ======== ==========
HITS AT:   3-20

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER
DT.CA  CAplus document type:  Patent
RL.P   Roles from patents:  BIOL (Biological study); PRP (Properties); USES
```

(Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 93 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 350271-02-2 REGISTRY
CN DNA, d(G-sp-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-sp-G) (9CI) (CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 3 a 3 c 11 g 3 t
NTE

type	------ location ------		description
modified link	g-1	- g-2	P-thio
modified link	g-19	- g-20	P-thio

SEQ 1 ggtgcatcga tgcaggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 94 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 350270-01-8 REGISTRY
CN DNA, d(C-T-C-G-T-C-G-A-C-G-A-G-C-G-G-G-G-T-T-G-A-T-G-G-A-C-C-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 10: PN: WO0149845 PAGE: 26 unclaimed sequence
FS NUCLEIC ACID SEQUENCE
SQL **29**
NA 4 a 7 c 13 g 5 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2001049845 unclaimed PAGE 26

SEQ 1 ctcgtcgacg agcggggttg atggaccgg
========== =======
HITS AT: 1-17
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 95 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 334074-92-9 REGISTRY
CN DNA, d(G-sp-G-sp-T-G-C-A-C-C-G-G-T-G-C-A-G-G-sp-G-sp-G-sp-G-sp-G) (9CI)
(CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 2 a 4 c 12 g 2 t
NTE

type	------ location ------		description
modified link	g-1	- g-2	P-thio
modified link	g-2	- t-3	P-thio
modified link	g-16	- g-17	P-thio
modified link	g-17	- g-18	P-thio
modified link	g-18	- g-19	P-thio
modified link	g-19	- g-20	P-thio

SEQ 1 ggtgcaccgg tgcaggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: BIOL (Biological study)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 96 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 334074-91-8 REGISTRY
CN DNA, d(G-sp-G-sp-T-G-C-A-T-C-G-A-T-G-C-A-G-G-sp-G-sp-G-sp-G-sp-G) (9CI)
(CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
SQL **20**
NA 3 a 3 c 11 g 3 t
NTE

type	------ location ------		description
modified link	g-1	- g-2	P-thio
modified link	g-2	- t-3	P-thio
modified link	g-16	- g-17	P-thio
modified link	g-17	- g-18	P-thio
modified link	g-18	- g-19	P-thio
modified link	g-19	- g-20	P-thio

SEQ 1 ggtgcatcga tgcaggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN

SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: BIOL (Biological study)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 97 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 332956-63-5 REGISTRY
CN DNA, d(G-sp-G-sp-G-G-T-C-G-A-C-G-T-C-G-A-C-G-T-C-G-A-G-G-sp-G-sp-G-sp-G-sp-G-sp-G) (9CI) (CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
SQL 27
NA 3 a 5 c 16 g 3 t
NTE

type	------ location ------		description
modified link	g-1	- g-2	P-thio
modified link	g-22	- g-23	P-thio
modified link	g-23	- g-24	P-thio
modified link	g-24	- g-25	P-thio
modified link	g-25	- g-26	P-thio

SEQ 1 ggggtcgacg tcgacgtcga ggggggg
========== ========== =======
HITS AT: 1-27

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 98 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 331880-34-3 REGISTRY
CN DNA, d(G-G-G-G-T-C-G-A-C-G-T-C-G-A-C-G-T-C-G-A-G-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1083: PN: WO0122972 SEQID: 1077 claimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 27
NA 3 a 5 c 16 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Artificial sequence	WO2001022972 claimed SEQID 1077

SEQ 1 ggggtcgacg tcgacgtcga ggggggg
========== ========== =======
HITS AT: 1-27

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 99 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 302865-85-6 REGISTRY
CN DNA, d(G-G-T-G-G-A-T-C-G-A-T-C-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 37: PN: WO0061151 SEQID: 137 claimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 3 a 3 c 11 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Synthetic	WO2000061151 claimed SEQID 137

SEQ 1 ggtggatcga tccaggggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 100 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 302865-84-5 REGISTRY
CN DNA, d(G-G-T-A-T-A-T-C-G-A-T-A-T-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 36: PN: WO0061151 SEQID: 136 claimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 5 a 1 c 9 g 5 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Synthetic	WO2000061151 claimed SEQID 136

```
SEQ      1 ggtatatcga tatagggggg
             ======== ==========
HITS AT:   3-20

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER
DT.CA  CAplus document type:  Patent
RLD.P  Roles for non-specific derivatives from patents:  BIOL (Biological
       study); PRP (Properties); USES (Uses)
               1 REFERENCES IN FILE CA (1907 TO DATE)
               1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
               1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17  ANSWER 101 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   301939-75-3  REGISTRY
CN   DNA, d(G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G) (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   54: PN: WO0061151 SEQID: 53 claimed DNA
FS   NUCLEIC ACID SEQUENCE
SQL  19
NA   3 a   3 c   10 g   3 t

PATENT ANNOTATIONS (PNTE):
Sequence |Patent
Source   |Reference
=========+============
Synthetic|WO2000061151
         |claimed
         |SEQID 53
---------+------------
         |WO2000061151
         |claimed
         |SEQID 73


SEQ      1 ggtgcatcga tgcaggggg
             ======== =========
HITS AT:   3-19

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER
DT.CA  CAplus document type:  Patent
RLD.P  Roles for non-specific derivatives from patents:  BIOL (Biological
       study); PRP (Properties); USES (Uses)
               1 REFERENCES IN FILE CA (1907 TO DATE)
               1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
               1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17  ANSWER 102 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   301939-65-1  REGISTRY
CN   DNA, d(G-G-T-G-C-A-C-C-G-G-T-G-C-A-G-G-G-G-G-G) (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   43: PN: WO0061151 SEQID: 42 claimed DNA
FS   NUCLEIC ACID SEQUENCE
```

SQL 20
NA 2 a 4 c 12 g 2 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Synthetic	WO2000061151 claimed SEQID 42

SEQ 1 ggtgcaccgg tgcaggggg
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 103 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 301939-63-9 REGISTRY
CN DNA, d(G-G-T-G-C-G-T-C-G-A-C-G-C-A-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 39: PN: WO0061151 SEQID: 39 claimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 2 a 4 c 12 g 2 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Synthetic	WO2000061151 claimed SEQID 39
	WO2000061151 claimed SEQID 41

SEQ 1 ggtgcgtcga cgcaggggg
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 104 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 301939-59-3 REGISTRY
CN DNA, d(G-G-T-G-C-A-T-C-G-A-T-G-C-A-G-G-G-G-G-G-G) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 32: PN: WO0061151 SEQID: 32 claimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 20
NA 3 a 3 c 11 g 3 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Synthetic	WO2000061151 claimed SEQID 32
	WO2000061151 claimed SEQID 34
	WO2000061151 claimed SEQID 37
	WO2000061151 claimed SEQID 38
	WO2000061151 claimed SEQID 43
	WO2000061151 claimed SEQID 72

SEQ 1 ggtgcatcga tgcaggggg
======== ==========
HITS AT: 3-20

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 105 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 115013-83-7 REGISTRY
CN Deoxyribonucleic acid, d(G-G-G-A-T-C-G-A-T-C-C-C-C-C-A-A-T-T-T-G-A), 5'-(dihydrogen phosphate), homopolymer, complex with deoxyribonucleic acid

d(T-C-A-A-A-T-T-G-G-G-G-G-A-T-C-G-A-T-C-C-C) 5'-(dihydrogen phosphate) homopolymer (1:1) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN DNA, d(T-C-A-A-A-T-T-G-G-G-G-G-A-T-C-G-A-T-C-C-C), 5'-(dihydrogen phosphate), homopolymer, complex with DNA d(G-G-G-A-T-C-G-A-T-C-C-C-C-C-A-A-T-T-T-G-A) 5'-(dihydrogen phosphate) homopolymer (1:1) (9CI)
FS NUCLEIC ACID SEQUENCE
SQL **42,21,21**
NA 10 a 11 c 11 g 10 t
NTE doublestranded (2)
modified

type	------ location ------	description
modified base	g-1	5'-phosphate
modified base	t-1[2]	5'-phosphate
homopolymer	?	unavailable
homopolymer	?[2]	unavailable

SEQ 1 gggatcgatc ccccaatttg a

SEQ 1 tcaaattggg ggatcgatcc c
========== ========== =
HITS AT: 1-12, 10-21
MF (C205 H259 N80 O127 P21)x . (C204 H259 N78 O127 P21)x
PCT Manual registration
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: BIOL (Biological study)

CM 1

CRN 115013-82-6
CMF (C204 H259 N78 O127 P21)x
CCI PMS

CM 2

CRN 114949-62-1
CMF C204 H259 N78 O127 P21
CCI MAN

CM 3

CRN 115013-81-5
CMF (C205 H259 N80 O127 P21)x
CCI PMS

CM 4

CRN 114949-64-3
CMF C205 H259 N80 O127 P21
CCI MAN
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17 ANSWER 106 OF 108 REGISTRY COPYRIGHT 2004 ACS on STN
RN 115013-81-5 REGISTRY
CN DNA, d(T-C-A-A-A-T-T-G-G-G-G-G-A-T-C-G-A-T-C-C-C), 5'-(dihydrogen phosphate), homopolymer (9CI) (CA INDEX NAME)

```
OTHER CA INDEX NAMES:
CN   Deoxyribonucleic acid, d(T-C-A-A-A-T-T-G-G-G-G-G-A-T-C-G-A-T-C-C-C),
     5'-(dihydrogen phosphate), homopolymer
FS   NUCLEIC ACID SEQUENCE
SQL  21
NA   5 a   5 c   6 g   5 t
NTE
----------------------------------------------------------------------
 type            ------ location ------         description
----------------------------------------------------------------------
modified base    t-1                          5'-phosphate
homopolymer      ?                            unavailable
----------------------------------------------------------------------

SEQ      1 tcaaattggg ggatcgatcc c
           ========== ========== =
HITS AT:   1-12, 10-21

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   (C205 H259 N80 O127 P21)x
CI   PMS, COM
PCT  Manual registration
SR   CA

     CM   1

     CRN  114949-64-3
     CMF  C205 H259 N80 O127 P21
     CCI  MAN

L17  ANSWER 107 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   115013-80-4  REGISTRY
CN   Deoxyribonucleic acid, d(G-G-G-A-T-C-G-A-T-C-C-C-C-C-A-G-C-T-C-G-A),
     5'-(dihydrogen phosphate), homopolymer, complex with deoxyribonucleic acid
     d(T-C-G-A-G-C-T-G-G-G-G-G-A-T-C-G-A-T-C-C-C) 5'-(dihydrogen phosphate)
     homopolymer (1:1) (9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   DNA, d(T-C-G-A-G-C-T-G-G-G-G-G-A-T-C-G-A-T-C-C-C), 5'-(dihydrogen
     phosphate), homopolymer, complex with DNA d(G-G-G-A-T-C-G-A-T-C-C-C-C-C-A-
     G-C-T-C-G-A) 5'-(dihydrogen phosphate) homopolymer (1:1) (9CI)
FS   NUCLEIC ACID SEQUENCE
SQL  42,21,21
NA   7 a   14 c   14 g   7 t
NTE  doublestranded (2)
     modified
----------------------------------------------------------------------
 type            ------ location ------         description
----------------------------------------------------------------------
modified base    g-1                          5'-phosphate
modified base    t-1[2]                       5'-phosphate
homopolymer      ?                            unavailable
homopolymer      ?[2]                         unavailable
----------------------------------------------------------------------

SEQ      1 gggatcgatc ccccagctcg a

SEQ      1 tcgagctggg ggatcgatcc c
           ========== ========== =
HITS AT:   1-12, 10-21
MF   (C204 H258 N81 O128 P21)x . (C202 H257 N80 O126 P21)x
PCT  Manual registration
SR   CA
```

```
LC   STN Files:   CA, CAPLUS
DT.CA  CAplus document type:  Journal
RL.NP  Roles from non-patents:  BIOL (Biological study)

     CM   1

     CRN  115013-79-1
     CMF  (C202 H257 N80 O126 P21)x
     CCI  PMS

          CM   2

          CRN  114949-60-9
          CMF  C202 H257 N80 O126 P21
          CCI  MAN

     CM   3

     CRN  115013-78-0
     CMF  (C204 H258 N81 O128 P21)x
     CCI  PMS

          CM   4

          CRN  114949-61-0
          CMF  C204 H258 N81 O128 P21
          CCI  MAN
               1 REFERENCES IN FILE CA (1907 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L17  ANSWER 108 OF 108  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   115013-78-0  REGISTRY
CN   DNA, d(T-C-G-A-G-C-T-G-G-G-G-G-A-T-C-G-A-T-C-C-C), 5'-(dihydrogen
     phosphate), homopolymer (9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   Deoxyribonucleic acid, d(T-C-G-A-G-C-T-G-G-G-G-G-A-T-C-G-A-T-C-C-C),
     5'-(dihydrogen phosphate), homopolymer
FS   NUCLEIC ACID SEQUENCE
SQL  21
NA   3 a   6 c   8 g   4 t
NTE
-------------------------------------------------------------------
 type            ------ location ------         description
-------------------------------------------------------------------
modified base    t-1                          5'-phosphate
homopolymer      ?                            unavailable
-------------------------------------------------------------------

SEQ      1 tcgagctggg ggatcgatcc c
           ========== ========== =
HITS AT:   1-12, 10-21

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   (C204 H258 N81 O128 P21)x
CI   PMS, COM
PCT  Manual registration
SR   CA

     CM   1

     CRN  114949-61-0
     CMF  C204 H258 N81 O128 P21
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CCI MAN

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=> fil capl uspatf toxcenter; s l17
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L18         57 L17

=> dup rem l18
PROCESSING COMPLETED FOR L18
L19          37 DUP REM L18 (20 DUPLICATES REMOVED)
                ANSWERS '1-31' FROM FILE CAPLUS
                ANSWERS '32-37' FROM FILE USPATFULL

=> d ibib ed ab hitrn 1-37; fil hom

L19  ANSWER 1 OF 37  CAPLUS  COPYRIGHT 2004 ACS on STN DUPLICATE 1
ACCESSION NUMBER:         2003:417589  CAPLUS
DOCUMENT NUMBER:          139:5654
TITLE:                    TLR7 knockout nonhuman animal for screening synthetic
                          immunopotentiator
INVENTOR(S):              Akira, Shizuo; Tomizawa, Hideyuki; Yamaoka, Takashi
PATENT ASSIGNEE(S):       Japan Science and Technology Corporation, Japan;
                          Sumitomo Pharmaceuticals Company, Limited
SOURCE:                   PCT Int. Appl., 59 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
     ---------------   ----  --------       ---------------  --------
     WO 2003043588      A1   20030530       WO 2002-JP12234  20021122
         W:  CA, JP, US
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT,
             LU, MC, NL, PT, SE, SK, TR
PRIORITY APPLN. INFO.:                    JP 2001-358295   A  20011122
ED   Entered STN:  01 Jun 2003
AB   It is intended to provide a nonhuman model animal unresponsive to a
     synthetic compd. which lacks a gene function encoding TLR7 recognizing an
     immunopotentiating synthetic compd. such as imidazoquinoline on its
     chromosome.  A gene fragment of the whole gene sites including the
     intracellular domain and the transmembrane domain or a part thereof of a
     TLR7 gene obtained from a mouse gene library is substituted by a plasmid
     having poly(A) signal and a marker gene to construct a targeting vector.
     Then this targeting vector is linearized and transferred into embryo stem
     cells.  The target embryo stem cells lacking the TLR7 gene function are
     microinjected into a mouse blastocyst to construct a chimeric mouse.  Then
     this chimeric mouse is crossed with a wild type mouse to give a
     heterozygote mouse.  Next, the heterozygote mouse is intercrossed and thus
     a TLR7 knockout mouse is obtained.  The TLR7 knockout mice are useful for
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screening substance that is capable of inhibiting or promoting immunopotentiation activity of synthetic imidazoquinoline compds. such as Imiquimod and R-848.

IT **534784-78-6** use registry # to match citation to sequence
RL: PRP (Properties)
(unclaimed nucleotide sequence; tLR7 knockout nonhuman animal for screening synthetic immunopotentiator)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 2003:377001 CAPLUS
DOCUMENT NUMBER: 138:390866
TITLE: Use of sterically stabilized cationic liposomes to efficiently deliver CpG oligonucleotides in vivo
INVENTOR(S): Klinman, Dennis M.; Gursel, Ihsan; Ishii, Ken J.; Kawakami, Koji; Joshi, Bharat H.; Puri, Raj K.
PATENT ASSIGNEE(S): Department of Health and Human Services, USA
SOURCE: PCT Int. Appl., 110 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003040308	A2	20030515	WO 2002-US24235	20020729
WO 2003040308	A3	20031120		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-308283P P 20010727
US 2002-206407 A 20020725

OTHER SOURCE(S): MARPAT 138:390866
ED Entered STN: 16 May 2003
AB Sterically stabilized cationic liposomes (SSCL) encapsulating a K type oligodeoxynucleotide (ODN) including a CpG motif are disclosed. These SSCL encapsulating a K type ODN can be used to effectively deliver the ODN to a cell. A novel method is also disclosed for producing the SSCL encapsulating the K type ODN. Administration of the SSCL encapsulating a K type ODN and a chemotherapeutic agent, such as a chimeric mol. comprising a targeting mol. selected from the group consisting of an IL-13, and an anti-IL-13 receptor antibody; and an effector mol. selected from the group consisting of a Pseudomonas exotoxin, a Diphtheria toxin, and a radionuclide, can be used to dramatically reduce the growth of solid tumors.

IT **524985-88-4 524985-91-9 524985-93-1 524985-98-6 524985-99-7 524986-00-3 524986-11-6 524986-12-7**
RL: PRP (Properties)
(unclaimed nucleotide sequence; use of sterically stabilized cationic liposomes to efficiently deliver CpG oligonucleotides in vivo)

L19 ANSWER 3 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3
ACCESSION NUMBER: 2003:154198 CAPLUS
DOCUMENT NUMBER: 138:203655
TITLE: Oligonucleotides containing stimulatory phosphorothioate motif and neutralizing motif for treating infections, allergies and cancers
INVENTOR(S): Krieg, Arthur M.; Vollmer, Jorg; Ulhman, Eugen
PATENT ASSIGNEE(S): Coley Pharmaceutical Group, Inc., USA; Coley Pharmaceutical G.m.b.H.; University of Iowa Research Foundation
SOURCE: PCT Int. Appl., 115 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003015711	A2	20030227	WO 2002-US26468	20020819
WO 2003015711	C2	20030410		
WO 2003015711	A3	20040610		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003148976	A1	20030807	US 2002-224523	20020819

PRIORITY APPLN. INFO.: US 2001-313273P P 20010817
US 2002-393952P P 20020703

ED Entered STN: 28 Feb 2003
AB A class of immunostimulatory nucleic acids having at least two functionally and structurally defined domains is provided. The nucleic acids or oligodeoxynucleotides contg. a combination of a stimulating motif (i.e. CpG) and a neutralizing motif (i.e. CG-rich palindrome or CG repeats) are, surprisingly, highly immunostimulatory. This class of combination motif immunostimulatory nucleic acids characteristically activate B cells and NK cells, and also induce prodn. of type I interferon. The immunostimulatory nucleic acids or oligonucleotides are therefore, useful for treating a variety of immune related disorders such as cancer, infectious disease, and allergic disorders.
IT **500239-90-7**
RL: PRP (Properties)
(unclaimed nucleotide sequence; oligonucleotides contg. stimulatory phosphorothioate motif and neutralizing motif for treating infections, allergies and cancers)

L19 ANSWER 4 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 4
ACCESSION NUMBER: 2003:6160 CAPLUS
DOCUMENT NUMBER: 138:88635
TITLE: Chimeric immunomodulatory compounds comprising nucleic acids linked through dendrimer or polysaccharide spacer and antigen for treating allergy, infection or cancer
INVENTOR(S): Fearon, Karen L.; Dina, Dino; Tuck, Stephen F.
PATENT ASSIGNEE(S): Dynavax Technologies Corporation, USA
SOURCE: PCT Int. Appl., 224 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003000922	A2	20030103	WO 2002-US20025	20020621
WO 2003000922	A3	20031023		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1404873	A2	20040407	EP 2002-744589	20020621

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.:	US 2001-299883P	P	20010621
	US 2002-375253P	P	20020423
	WO 2002-US20025	W	20020621

ED Entered STN: 05 Jan 2003

AB The invention provides immunomodulatory compds. (CIC) and methods for immunomodulation of individuals using the immunomodulatory compds. The CIC comprises one or more nucleic acid moieties and one or more non-nucleic acid moieties such as dendrimer, polysaccharide, and crosslinked polysaccharide through phosphodiester, phosphorothioate ester, phosphorodithioate ester, and other linkages. The CIC is capable of stimulating prodn. of interferon .gamma. and .alpha. by human peripheral blood mononuclear cells, as well as human B cell proliferation. Endotoxin-free compns. comprising the CIC covalently or non-covalently conjugated with antigen and cationic microsphere are useful for treating disorders assocd. with IgE or Th2-type immune response such as allergy, asthma, infection, viral infection, idiopathic pulmonary fibrosis, and cancer.

IT **482663-88-7P 482663-89-8P**
RL: PAC (Pharmacological activity); PRP (Properties); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(chimeric immunomodulatory compds. comprising nucleic acids linked through dendrimer or polysaccharide spacer and antigen for treating allergy, infection or cancer)

L19 ANSWER 5 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 5
ACCESSION NUMBER: 2003:950038 CAPLUS
DOCUMENT NUMBER: 140:26897
TITLE: Chimeric immunomodulatory compounds comprising two or more nucleic acid moieties and non-nucleic acid spacer
INVENTOR(S): Fearon, Karen L.; Dina, Dino; Tuck, Stephen F.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 96 pp., Cont.-in-part of U.S. Ser. No. 176,883.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003225016	A1	20031204	US 2002-328578	20021223
US 2003175731	A1	20030918	US 2002-176883	20020621
US 2003199466	A1	20031023	US 2002-177826	20020621

PRIORITY APPLN. INFO.: US 2001-299883P P 20010621
US 2002-375253P P 20020423
US 2002-176883 A2 20020621
US 2002-177826 A2 20020621

ED Entered STN: 05 Dec 2003

AB The invention provides immunomodulatory compds. and methods for immunomodulation of individuals using the immunomodulatory compds. The immunomodulatory compds. comprise two or more nucleic acid moieties and a non-nucleic acid spacer moiety. The nucleic acid contains e.g. 5'-CG-3', 5'-TCG-3', 5'-TCGA-3', 5'-TCGACGT-3', or 5'-TCGACGA-3'; and the non-nucleic acid is an oligoethylene glycol such as hexaethylene glycol. The chimeric compds. are incorporated into endotoxin-free compns. comprising antigen, pharmaceutically acceptable excipient, and optionally a cationic microsphere for modulating immune response.

IT **631926-11-9P 631926-12-0P**
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(chimeric immunomodulatory compds. comprising two or more nucleic acid moieties and non-nucleic acid spacer)

L19 ANSWER 6 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 6
ACCESSION NUMBER: 2003:590824 CAPLUS
DOCUMENT NUMBER: 139:154891
TITLE: Multiple CpG oligodeoxynucleotides and their use to induce an immune response
INVENTOR(S): Klinman, Dennis; Ishii, Ken; Verthelyi, Daniela
PATENT ASSIGNEE(S): The Government of the U.S.A., the Secretary of the Department of Health and Human Services, USA
SOURCE: U.S. Pat. Appl. Publ., 41 pp., Cont.-in-part of Appl. No. PCT/US01/01122.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003144229	A1	20030731	US 2002-194035	20020712
WO 2001051500	A1	20010719	WO 2001-US1122	20010112

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-176115P P 20000114
WO 2001-US1122 A2 20010112

OTHER SOURCE(S): MARPAT 139:154891

ED Entered STN: 01 Aug 2003

AB Compns. including multiple oligodeoxynucleotides with a CpG motif are disclosed herein. The compns. can include either D or K type oligodeoxynucleotides. These compns. are of use in inducing an immune

response in a large percentage of the individuals in a population.
IT **569431-10-3 569431-14-7 569431-16-9**
569431-26-1
RL: PRP (Properties)
(unclaimed nucleotide sequence; multiple CpG oligodeoxynucleotides and their use to induce an immune response)

L19 ANSWER 7 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 7
ACCESSION NUMBER: 2003:355834 CAPLUS
DOCUMENT NUMBER: 138:362665
TITLE: Immunostimulatory nucleic acids for the treatment of asthma and allergy
INVENTOR(S): Bratzler, Robert L.; Petersen, Deanna M.; Fouron, Yves
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 221 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003087848	A1	20030508	US 2001-776479	20010202
US 2004067902	A9	20040408		

PRIORITY APPLN. INFO.: US 2000-179991P P 20000203
OTHER SOURCE(S): MARPAT 138:362665
ED Entered STN: 09 May 2003
AB The invention involves administration of an immunostimulatory nucleic acid alone or in combination with an asthma/allergy medicament for the treatment or prevention of asthma and allergy in subjects. The combination of drugs are administered in synergistic amts. or in various dosages or at various time schedules. The invention also relates to kits and compns. concerning the combination of drugs.
IT **524084-27-3**
RL: PRP (Properties)
(unclaimed nucleotide sequence; immunostimulatory nucleic acids for the treatment of asthma and allergy)

L19 ANSWER 8 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 8
ACCESSION NUMBER: 2003:241991 CAPLUS
DOCUMENT NUMBER: 138:270283
TITLE: Oligodeoxynucleotide and its use to induce an immune response
INVENTOR(S): Klinman, Dennis; Verthelyi, Daniela; Ishii, Ken; Mond, James J.; Gursel, Mayda
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 52 pp., Cont.-in-part of U.S. Ser. No. 958,713.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003060440	A1	20030327	US 2002-68160	20020206

PRIORITY APPLN. INFO.: US 1999-128898P P 19990412
US 2001-958713 A2 20011011
ED Entered STN: 28 Mar 2003
AB D type CpG oligodeoxynucleotides are provided herein that include a

sequence represented by the following formula: 5'= X1X2X3Pu1Py2CpGPu3Py4X4X5X6(W)M(G)N-3' wherein the central CpG motif is unmethylated, Pu is a purine nucleotide, Py is a pyrimidine nucleotide, X and W are any nucleotide, M is any integer from 0 to 10, and N is any integer from 4 to 10. The oligodeoxynucleotides can activate immune cells, such as antigen-presenting cells or natural killer cell, and/or can stimulate prodn. of cytokines. Methods of using these oligodeoxynucleotides to induce an immune response are provided. The oligodeoxynucleotides can be used in treatment or amelioration of cancer, allergy, autoimmune disease, immunodeficiency, or infection. They can also be used to enhance the efficacy of vaccines.

IT **503572-62-1 503572-63-2 503572-65-4**
503572-66-5 503572-69-8 503572-73-4
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(CpG oligodeoxynucleotides for immunostimulation and immunotherapy of various diseases)

IT **503575-76-6 503575-92-6 503575-93-7**
503575-94-8
RL: PRP (Properties)
(unclaimed nucleotide sequence; oligodeoxynucleotide and its use to induce an immune response)

IT **503576-63-4 503576-64-5 503576-65-6**
RL: PRP (Properties)
(unclaimed sequence; oligodeoxynucleotide and its use to induce an immune response)

L19 ANSWER 9 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 9
ACCESSION NUMBER: 2003:203398 CAPLUS
DOCUMENT NUMBER: 138:231727
TITLE: Immunostimulatory nucleic acid for treatment of non-allergic inflammatory diseases
INVENTOR(S): Krieg, Arthur M.; Berg, Daniel J.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 229 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003050268	A1	20030313	US 2002-112653	20020329

PRIORITY APPLN. INFO.: US 2001-279642P P 20010329
OTHER SOURCE(S): MARPAT 138:231727
ED Entered STN: 14 Mar 2003
AB The invention provides methods and compns. for using immunostimulatory nucleic acids to treat non-allergic inflammatory diseases. Non-allergic inflammatory diseases that may be treated according to the methods and products of the invention include psoriasis and inflammatory bowel disease. The invention further provides methods for augmenting a Th1 response to immunostimulatory nucleic acid involving inhibition of prostaglandin-mediated counter-regulatory response.

IT **501983-30-8**
RL: PRP (Properties)
(unclaimed nucleotide sequence; immunostimulatory nucleic acid for treatment of non-allergic inflammatory diseases)

L19 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 10
ACCESSION NUMBER: 2003:878099 CAPLUS

DOCUMENT NUMBER: 140:58003
TITLE: Antigenic Epitopes Fused to Cationic Peptide Bound to Oligonucleotides Facilitate Toll-Like Receptor 9-Dependent, but CD4+ T Cell Help-Independent, Priming of CD8+ T Cells
AUTHOR(S): Schirmbeck, Reinhold; Riedl, Petra; Zurbriggen, Rinaldo; Akira, Shizuo; Reimann, Joerg
CORPORATE SOURCE: Department of Medical Microbiology and Immunology, University of Ulm, Ulm, D-89081, Germany
SOURCE: Journal of Immunology (2003), 171(10), 5198-5207
CODEN: JOIMA3; ISSN: 0022-1767
PUBLISHER: American Association of Immunologists
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 10 Nov 2003
AB A priority in current vaccine research is the development of adjuvants that support the efficient priming of long-lasting, CD4+ T cell help-independent CD8+ T cell immunity. Oligodeoxynucleotides (ODN) with immune-stimulating sequences (ISS) contg. CpG motifs facilitate the priming of MHC class I-restricted CD8+ T cell responses to proteins or peptides. We show that the adjuvant effect of ISS+ ODN on CD8+ T cell priming to large, recombinant Ag is enhanced by binding them to short, cationic (arginine-rich) peptides that themselves have no adjuvant activity in CD8+ T cell priming. Fusing antigenic epitopes to cationic (8- to 10-mer) peptides bound to immune-stimulating ISS+ ODN or non-stimulating NSS+ ODN (without CpG-contg. sequences) generated immunogens that efficiently primed long-lasting, specific CD8+ T cell immunity of high magnitude. Different MHC class I-binding epitopes fused to short cationic peptides of different origins showed this adjuvant activity. Quant. ODN binding to cationic peptides strikingly reduced the toxicity of the latter, suggesting that it improves the safety profile of the adjuvant. CD8+ T cell priming supported by this adjuvant was Toll-like receptor 9 dependent, but required no CD4+ T cell help. ODN (with or without CpG-contg. sequences) are thus potent Th1-promoting adjuvants when bound to cationic peptides covalently linked to antigenic epitopes, a mode of Ag delivery prevailing in many viral nucleocapsids.
IT **637803-30-6**
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ODN-DC19 with CpG-contg.; oligodeoxynucleotides as potent T cell priming adjuvants when bound to cationic peptides fused to antigenic epitopes)
REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 11 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 11
ACCESSION NUMBER: 2002:521467 CAPLUS
DOCUMENT NUMBER: 137:88455
TITLE: Inhibition of angiogenesis by nucleic acids
INVENTOR(S): Bratzler, Robert L.
PATENT ASSIGNEE(S): Coley Pharmaceutical Group, Inc., USA
SOURCE: PCT Int. Appl., 276 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002053141	A2	20020711	WO 2001-US48458	20011214
WO 2002053141	A3	20030522		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003055014 A1 20030320 US 2001-17995 20011214
PRIORITY APPLN. INFO.: US 2000-255534P P 20001214
OTHER SOURCE(S): MARPAT 137:88455
ED Entered STN: 12 Jul 2002
AB The invention provides methods and products for inhibiting angiogenesis. At least one antiangiogenic nucleic acid mol. is administered to a subject to prevent or treat unwanted angiogenesis. Non-nucleic acid antiangiogenic agents also can be administered.
IT **441364-86-9D**, phosphorothioate linkage-contg.
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nucleic acids for inhibition of angiogenesis)

L19 ANSWER 12 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 12
ACCESSION NUMBER: 2002:369804 CAPLUS
DOCUMENT NUMBER: 137:19096
TITLE: Differential and competitive activation of human immune cells by distinct classes of CpG oligodeoxynucleotide
AUTHOR(S): Gursel, Mayda; Verthelyi, Daniela; Gursel, Ihsan; Ishii, Ken J.; Klinman, Dennis M.
CORPORATE SOURCE: Section of Retroviral Research, Center for Biologics Evaluation and Research, Food and Drug Administration, Bethesda, MD, 20892, USA
SOURCE: Journal of Leukocyte Biology (2002), 71(5), 813-820
CODEN: JLBIE7; ISSN: 0741-5400
PUBLISHER: Federation of American Societies for Experimental Biology
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 19 May 2002
AB Synthetic oligodeoxynucleotides (ODN) expressing "CpG motifs" show promise as immune adjuvants, antiallergens, anticancer, and immunoprotective agents. Two structurally distinct classes of CpG ODN have been identified that stimulate human PBMC. This work establishes that both types of ODN bind to and are internalized by the same individual B cells, NK cells, and monocytes. However, the intracellular localization of "D" and "K" ODN differs, as does their functional activity: "K" type ODN trigger monocytes and B cells to proliferate and secrete IL-6 and IgM, whereas "D" type ODN induce NK cells to produce IFN-.gamma. and monocytes to differentiate into CD83+/CD86+ dendritic cells. In monocytes, these two types of ODN (which differ in backbone compn. and CpG motif) cross-inhibit one another's activity. Thus, different types of CpG ODN have distinct and in some cases incompatible effects on the same cells, a finding with important implications for the therapeutic use of these agents.
IT **434529-77-8**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(differential and competitive activation of human immune cells by distinct classes of CpG oligodeoxynucleotide)
REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 13 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 13

ACCESSION NUMBER: 2001:526086 CAPLUS
DOCUMENT NUMBER: 135:102560
TITLE: Oligodeoxynucleotide and its use to induce an immune response
INVENTOR(S): Klinman, Dennis; Ishii, Ken; Verthelyi, Daniela
PATENT ASSIGNEE(S): United States Dept. of Health and Human Services, USA
SOURCE: PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001051500	A1	20010719	WO 2001-US1122	20010112
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001027889	A5	20010724	AU 2001-27889	20010112
EP 1322655	A1	20030702	EP 2001-902045	20010112
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
US 2003144229	A1	20030731	US 2002-194035	20020712

PRIORITY APPLN. INFO.: US 2000-176115P P 20000114
WO 2001-US1122 W 20010112

ED Entered STN: 20 Jul 2001
AB The present invention provides a substantially pure or isolated oligodeoxynucleotide (ODN) of at least about 10 nucleotides comprising different CpG sequences, as well as an oligodeoxynucleotide delivery complex and a pharmacol. compn. comprising an ODN or ODNs, and a method of inducing an immune response by administering such an ODN or ODNs to a host.
IT **350271-02-2 350271-06-6 350271-08-8**
350271-18-0
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligodeoxynucleotide and its use to induce an immune response)
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 14 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 14
ACCESSION NUMBER: 2001:507845 CAPLUS
DOCUMENT NUMBER: 135:103353
TITLE: A novel human growth factor betacellulin splice variant BTC-.beta. lacking C5-C6 disulfide loop, cDNA sequence, diagnostic and therapeutic uses
INVENTOR(S): Dunbar, Andrew Jeremy; Goddard, Christopher
PATENT ASSIGNEE(S): Gropep Limited, Australia
SOURCE: PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001049845	A1	20010712	WO 2001-AU10	20010105

W: AU, CA, JP, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR

PRIORITY APPLN. INFO.: AU 2000-4969 A 20000106
ED Entered STN: 13 Jul 2001
AB The invention relates to a polynucleotide sequence encoding a naturally occurring splice variant of human betacellulin (BTC), designated BTC-.beta.. The polynucleotide sequence of the BTC-.beta. lacks the sequence encoding the last C5-C6 disulfide loop of the epidermal growth factor CX7CX4C10CX1CX8C motif, which is normally present in the gene encoding the authentic BTC. The BTC-.beta. may be used for treating conditions mediated or modulated by ErbB receptors. The invention also provides methods for producing the BTC-.beta. by recombinant DNA techniques and antibodies against the BTC-.beta..
IT **350270-01-8**
RL: PRP (Properties)
(unclaimed sequence; novel human growth factor betacellulin splice variant BTC-.beta. lacking C5-C6 disulfide loop, cDNA sequence, diagnostic and therapeutic uses)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 15 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 15
ACCESSION NUMBER: 2001:247202 CAPLUS
DOCUMENT NUMBER: 134:279560
TITLE: Methods related to immunostimulatory nucleic acid-induced interferon
INVENTOR(S): Hartmann, Gunther; Bratzler, Robert L.; Krieg, Arthur
PATENT ASSIGNEE(S): Coley Pharmaceutical Group, Inc., USA; University of Iowa Research Foundation
SOURCE: PCT Int. Appl., 168 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001022990	A2	20010405	WO 2000-US26527	20000927
WO 2001022990	A3	20011004		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1220684	A2	20020710	EP 2000-965477	20000927

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL

JP 2003510290	T2	20030318	JP 2001-526199	20000927
ZA 2002001959	A	20030310	ZA 2002-1959	20020308

PRIORITY APPLN. INFO.: US 1999-156147P P 19990927
WO 2000-US26527 W 20000927
ED Entered STN: 06 Apr 2001

AB Methods and compns. are provided for extending the clin. utility of IFN-.alpha. in the treatment of a variety of viral and proliferative disorders. Among other aspects, the invention provides methods which increase the efficacy of IFN-.alpha. treatment and reduce IFN-.alpha. treatment-related side effects. In addn., methods are provides for supporting the survival and for activating natural interferon producing cells (IPCs) in vitro without exogenous IL-3 or GM-CSF. The invention is based on the discovery that certain CpG and non-CpG ISNAs promote survival and stimulation of IPCs.

IT **332956-63-5**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immunostimulatory nucleic acids for improving efficacy and reducing side effects of interferon therapy against viral infection and proliferative disease)

L19 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 16
ACCESSION NUMBER: 2001:247187 CAPLUS
DOCUMENT NUMBER: 134:275762
TITLE: Immunostimulatory nucleic acids
INVENTOR(S): Krieg, Arthur M.; Schetter, Christian; Vollmer, Jorg
PATENT ASSIGNEE(S): University of Iowa Research Foundation, USA; Coley Pharmaceutical G.m.b.H.
SOURCE: PCT Int. Appl., 338 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001022972	A2	20010405	WO 2000-US26383	20000925
WO 2001022972	A3	20020117		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1221955	A2	20020717	EP 2000-965433	20000925
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
BR 2000014236	A	20021015	BR 2000-14236	20000925
TR 200200797	T2	20021021	TR 2002-20020079	20000925
JP 2003510282	T2	20030318	JP 2001-526182	20000925
EE 200200158	A	20030616	EE 2002-158	20000925
NZ 517929	A	20040227	NZ 2000-517929	20000925
ZA 2002001963	A	20030310	ZA 2002-1963	20020308
BG 106538	A	20021229	BG 2002-106538	20020321
NO 2002001453	A	20020527	NO 2002-1453	20020322
US 2003212026	A1	20031113	US 2002-314578	20021209

PRIORITY APPLN. INFO.:
US 1999-156113P P 19990925
US 1999-156135P P 19990927
US 2000-227436P P 20000823
US 2000-669187 A1 20000925
WO 2000-US26383 W 20000925

OTHER SOURCE(S): MARPAT 134:275762
ED Entered STN: 06 Apr 2001

AB The invention relates to immunostimulatory nucleic acid compns. and methods of using the compns. The T-rich nucleic acids contain poly T sequences and/or have greater than 25% T nucleotide residues. The TG nucleic acids have TG dinucleotides. The C-rich nucleic acids have at least one poly-C region and/or greater than 50% C nucleotides. These immunostimulatory nucleic acids function in a similar manner to nucleic acids contg. CpG motifs. The invention also encompasses preferred CpG nucleic acids.

IT **331880-34-3**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immunostimulatory nucleic acids)

L19 ANSWER 17 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 17
ACCESSION NUMBER: 2000:741930 CAPLUS
DOCUMENT NUMBER: 133:320986
TITLE: Oligodeoxynucleotide and its use to induce an immune response
INVENTOR(S): Klinman, Dennis; Ishii, Ken; Verthelyi, Daniela
PATENT ASSIGNEE(S): United States Dept. of Health and Human Services, USA
SOURCE: PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000061151	A2	20001019	WO 2000-US9839	20000412
WO 2000061151	A3	20010426		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1176966	A2	20020206	EP 2000-923283	20000412
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.: US 1999-128898P P 19990412
WO 2000-US9839 W 20000412

ED Entered STN: 20 Oct 2000

AB The present invention provides a substantially pure or isolated oligodeoxynucleotide of at least about 10 nucleotides comprising a sequence represented by either the formula: 5' N1N2N3T-CpG-WN4N5N6 3' wherein the central CpG motif is unmethylated, W is A or T, and N1, N2, N3, N4, N5, and N6 are any nucleotides, or the formula: 5' RY-CpG-RY 3' wherein the central CpG motif is unmethylated, R is A or G, and Y is C or T, as well as an oligodeoxynucleotide delivery complex and a pharmacol. compn. comprising the present inventive oligodeoxynucleotide, and a method of inducing an immune response by administering the present inventive oligodeoxynucleotide to a host. The oligodeoxynucleotides with phosphate or phosphorothioate backbone modification are useful for inducing cell-mediated and humoral immune response and are therefore useful for treatment of allergy, asthma, cancer, autoimmune disease, immunol. disease, infection, and immune deficiency.

IT **301939-59-3D**, phosphate or phosphorothioate derivs.

301939-63-9D, phosphate or phosphorothioate derivs.
301939-65-1D, phosphate or phosphorothioate derivs.
301939-75-3D, phosphate or phosphorothioate derivs.
302865-84-5D, phosphate or phosphorothioate derivs.
302865-85-6D, phosphate or phosphorothioate derivs.
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligodeoxynucleotide for use to induce immune response)

L19 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:142919 CAPLUS
DOCUMENT NUMBER: 140:198064
TITLE: Particulate immunostimulant
INVENTOR(S): Van Nest, Gary; Tuck, Stephen
PATENT ASSIGNEE(S): Dynavax Technologies Corporation, USA
SOURCE: PCT Int. Appl., 90 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004014322	A2	20040219	WO 2003-US25415	20030812

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-402968P P 20020812
ED Entered STN: 22 Feb 2004
AB The authors disclose immunomodulatory compns. which comprise a cationic condensing agent, an immunomodulatory compd., and a stabilizing agent. The compns. of the invention typically form particles which have increased immunomodulatory activity as compared to immunomodulatory compds. not formulated in the compns. of the invention. Also provided are methods of making the compns. and methods for therapeutic use of the compns. In one example, interferon-.gamma. release by human mononuclear cells was shown to be enhanced by the combination of CpG oligonucleotide, polymyxin B, and Tween-80.
IT **662376-92-3**
RL: PRP (Properties)
(unclaimed sequence; particulate immunostimulant)

L19 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:451477 CAPLUS
TITLE: Method of treating and preventing infections in immunocompromised subjects with immunostimulatory CpG oligonucleotides
INVENTOR(S): Klinman, Dennis M.; Verthelyi, Daniela
PATENT ASSIGNEE(S): The Government of the USA as Represented by the Secretary of the Dept. of Health & Human Services, USA
SOURCE: U.S. Pat. Appl. Publ., 64 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004105872	A1	20040603	US 2003-666022	20030917

PRIORITY APPLN. INFO.: US 2002-411944P P 20020918
ED Entered STN: 04 Jun 2004
AB A method is disclosed herein for increasing an immune response to an opportunistic infection in an immunocompromised subject. In one embodiment, the subject is infected with a lentivirus. The method includes increasing an immune response to a pathogen using D oligodeoxynucleotides including a CpG motif. Addn. of K or D CpG oligodeoxynucleotides boosted the immunogenicity of the Engerix B hepatitis B virus vaccine to render refractory SIV-infected macaques responsive to vaccination.
IT **700878-94-0 700878-95-1 700878-96-2**
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nucleotide sequence, immunocompromised macaques response to HBV vaccine improvement with; immunostimulatory CpG oligonucleotides for treating and preventing infections in immunocompromised subjects)
IT **698400-46-3 698400-48-5 698400-54-3**
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nucleotide sequence; immunostimulatory CpG oligonucleotides for treating and preventing infections in immunocompromised subjects)
IT **698753-95-6 698754-76-6 698754-77-7**
RL: PRP (Properties)
(unclaimed nucleotide sequence; method of treating and preventing infections in immunocompromised subjects with immunostimulatory CpG oligonucleotides)

L19 ANSWER 20 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:511473 CAPLUS
DOCUMENT NUMBER: 139:79147
TITLE: Use of CpG oligodeoxynucleotides to induce angiogenesis
INVENTOR(S): Klinman, Dennis M.; Zheng, Mei; Rouse, Barry T.
PATENT ASSIGNEE(S): The Government of the United States of America as Represented by the Secretary of the Department of Health and Human Services, USA; The University of Tennessee Research Corporation
SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003054161	A2	20030703	WO 2002-US40955	20021219
WO 2003054161	A3	20031030		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,

UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-343457P P 20011220
OTHER SOURCE(S): MARPAT 139:79147
ED Entered STN: 04 Jul 2003
AB This disclosure provides a method of inducing prodn. of vascular endothelial growth factor by a cell. The method includes contacting the cell with a CpG oligonucleotide, thereby inducing the prodn. of vascular endothelial growth factor by the cell. The disclosure further provides a method inducing neovascularization in a tissue. This method includes comprising introducing a CpG oligodeoxynucleotide into an area of the tissue wherein the formation of new blood vessels is desired, thereby inducing neovascularization in the area of the tissue.
IT **552439-49-3 552439-50-6 552439-53-9 552439-56-2 552439-61-9 552439-62-0 552439-63-1**
RL: PRP (Properties)
(unclaimed nucleotide sequence; use of CpG oligodeoxynucleotides to induce angiogenesis)

L19 ANSWER 21 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:202770 CAPLUS
DOCUMENT NUMBER: 138:236936
TITLE: Differentiation of human monocytes into mature functional dendritic cells with CpG oligodeoxynucleotides
INVENTOR(S): Klinman, Dennis M.; Gursel, Mayda; Verthelyi, Daniela
PATENT ASSIGNEE(S): The Government of the United States of America as Represented by the Secretary of Health and Human Services, USA
SOURCE: PCT Int. Appl., 69 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003020884	A2	20030313	WO 2002-US25732	20020813

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-312190P P 20010814
ED Entered STN: 14 Mar 2003
AB This disclosure relates to dendritic cells, specifically to the methods of generating mature dendritic cells using D type oligodeoxynucleotides including a CpG motif. The methods include contacting a dendritic cell precursor with a D ODN to generate a mature dendritic cell. In one specific, non-limiting example, the method includes contacting the

dendritic cell with an antigen. In another specific, non-limiting example, the method is a single step method wherein the D ODN is administered without other cytokines, such as GM-CSF and/or IL-4. These methods are of use both in vitro and in vivo. The findings disclosed herein document that mature DC can be rapidly and reproducibly generated by culturing PBMC or elutriated monocytes with D ODN in serum-free or conventional medium. These DC efficiently present antigen to autologous T cells in vitro and in vivo, and support the induction of Th1 biased immune responses. Without being bound by theory, the effect of D ODN on DC differentiation is dependent upon IFN.alpha. -secreting pDC being present during culture. Current results indicate that IFN.alpha. is necessary but not sufficient by itself to induce the differentiation of human monocytes into functionally active DC (Fig 2C). It is likely that functional differences between D and K type CpG ODN reflects differences in their recognition, uptake and/or processing by immune cells. These differences in uptake and activity have a structural basis. Whereas the immunostimulatory motif of a conventional ODN consists of a phosphorothioate TCGTT/A, the relevant motif in a D ODN consists of a phosphodiester purine/pyrimidine/CG/purine/pyrimidine hexamer (Verthelyi et al., Jlmmunol. 166: 2372-2377, 2001, which is incorporated herein by ref.). In addn., the hexamer of a D ODN is flanked by complementary bases that form a hairpin loop with the CpG dinucleotide at its apex - secondary structure that is absent from conventional CpG ODN. Finally, D but not K ODN are capped at the 3' end with a poly-G tail. This poly-G tail may interact with scavenger receptors on immune cells. D ODN reproducibly stimulated approx. 60 % of monocytes to differentiate into DC, as detd. phenotypically, histol. and functionally. The prodn. of IFN.alpha. by pDC present in culture contributed to this maturation (Fig 1A and 2B). The DC generated by D ODN are functionally active, as they promote antigen-specific immune responses in vitro and in vivo (Fig 3, 4, 5 and 6).

IT **501729-67-5 501729-68-6**
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
(ODN nucleotide sequence; differentiation of human monocytes into mature functional dendritic cells with CpG oligodeoxynucleotides)

IT **501834-13-5 501834-14-6 501834-15-7 501834-16-8 501834-25-9 501834-30-6 501834-31-7 501834-32-8 501834-43-1 501834-44-2**
RL: PRP (Properties)
(unclaimed nucleotide sequence; differentiation of human monocytes into mature functional dendritic cells with CpG oligodeoxynucleotides)

L19 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:306455 CAPLUS
DOCUMENT NUMBER: 139:159661
TITLE: CpG Oligodeoxynucleotides Protect Normal and SIV-Infected Macaques from Leishmania Infection
AUTHOR(S): Verthelyi, Daniela; Gursel, Mayda; Kenney, Richard T.; Lifson, Jeffrey D.; Liu, Shuying; Mican, Joan; Klinman, Dennis M.
CORPORATE SOURCE: Center for Biologics Evaluation and Research, Section of Retroviral Immunology, Food and Drug Administration, Bethesda, MD, 20892, USA
SOURCE: Journal of Immunology (2003), 170(9), 4717-4723
CODEN: JOIMA3; ISSN: 0022-1767
PUBLISHER: American Association of Immunologists
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 22 Apr 2003
AB Oligodeoxynucleotides contg. CpG motifs (CpG ODNs) mimic microbial DNA and

activate effectors of the innate immune response, which limits the spread of pathogens and promotes an adaptive immune response. CpG ODNs have been shown to protect mice from infection with intracellular pathogens. Unfortunately, CpG motifs that optimally stimulate humans are only weakly active in mice, mandating the use of nonhuman primates to monitor the activity and safety of "human" CpG ODNs in vivo. This study demonstrates that CpG ODN treatment of rhesus macaques significantly reduces the severity of the lesions caused by a challenge with Leishmania: Leishmania superinfection is common in immunocompromised hosts, particularly those infected with HIV. This study shows that PBMCs from HIV-infected subjects respond to stimulation with CpG ODNs. To det. whether CpG ODNs can protect retrovirus-infected primates, SIV-infected macaques were treated with CpG ODNs and then challenged with Leishmania: Both lesion size and parasite load were significantly reduced in the CpG-treated animals. These findings support the clin. development of CpG ODNs as immunoprotective agents in normal and HIV-infected patients.

IT **573722-80-2 573722-82-4 573722-83-5**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(CpG oligodeoxynucleotides protect normal and SIV-infected macaques from Leishmania infection)

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 23 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:975836 CAPLUS
DOCUMENT NUMBER: 140:75912
TITLE: IL-10 regulates plasmacytoid dendritic cell response to CpG-containing immunostimulatory sequences
AUTHOR(S): Duramad, Omar; Fearon, Karen L.; Chan, Jean H.; Kanzler, Holger; Marshall, Jason D.; Coffman, Robert L.; Barrat, Franck J.
CORPORATE SOURCE: Dynavax Technologies Corporation, Berkeley, CA, USA
SOURCE: Blood (2003), 102(13), 4487-4492
CODEN: BLOOAW; ISSN: 0006-4971
PUBLISHER: American Society of Hematology
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 15 Dec 2003
AB Immunostimulatory sequences (ISS) are short oligonucleotides contg. unmethylated cytosine-phosphate-guanine (CpG) dinucleotides that stimulate innate immune responses through Toll-like receptor-9 on B cells and plasmacytoid dendritic cell (PDC) precursors. The anti-inflammatory cytokine interleukin (IL)-10 is predicted to be a potent inhibitor of many of the activities described for ISS, and this may impact the use of ISS in disease states characterized by elevated IL-10. As the activities of ISS on PDCs are central to many clin. applications of ISS, we have studied the effects of IL-10 on PDC stimulation by 3 distinct classes of ISS. IL-10 inhibited cytokine prodn. and survival of ISS-activated PDCs; however, IL-12 induction was much more sensitive to inhibition than interferon (IFN)-.alpha. induction. Within the PDC population are cells that respond to ISS by producing either IL-12 or IFN-.alpha. but not both cytokines. IL-12-producing PDCs require costimulation through CD40 and appear more mature than IFN-.alpha.-producing PDCs. The 3 distinct classes of ISS differed with respect to induction of PDC maturation and T-cell priming capacity. IL-10 regulated PDC activation but did not inhibit the subsequent T-cell-priming ability of PDCs already activated by ISS.

IT **640803-43-6**
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); BIOL (Biological study)
(IL-10 regulates plasmacytoid dendritic cell response to CpG-contg. immunostimulatory sequences)

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 24 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:229621 CAPLUS
DOCUMENT NUMBER: 139:20882
TITLE: Response of peripheral blood mononuclear cells from lupus patients to stimulation by CpG oligodeoxynucleotides
AUTHOR(S): Zeuner, R. A.; Klinman, D. M.; Illei, G.; Yarboro, C.; Ishii, K. J.; Gursel, M.; Verthelyi, D.
CORPORATE SOURCE: Center for Biologics Evaluation and Research/Food and Drug Administration, Bethesda, MD, 20892, USA
SOURCE: Rheumatology (Oxford, United Kingdom) (2003), 42(4), 563-569
CODEN: RUMAFK; ISSN: 1462-0324
PUBLISHER: Oxford University Press
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 25 Mar 2003
AB Objectives: Increased levels of hypomethylated CpG-contg. DNA in sera from patients with systemic lupus erythematosus (SLE) may contribute to the initiation and/or perpetuation of the disease. This study characterizes the in vitro response of peripheral blood mononuclear cells (PBMC) from SLE patients to CpG DNA. Methods: Secretion of cytokines and IgM, cell proliferation and up-regulation of co-stimulatory mols. were evaluated in PBMC from SLE patients and normal controls after stimulation with synthetic oligodeoxynucleotides (ODN) contg. CpG motifs. Results: Up-regulation of co-stimulatory mols. and the secretion of interferon-.alpha. and interleukin-6 (IL-6) in response to CpG ODN was significantly reduced in monocytes and dendritic cells from SLE patients. Secretion of interferon-.gamma. by natural killer (NK) cells was also reduced. In contrast, the IgM and IL-10 response of B cells to CpG ODN was normal. Conclusion: Monocytes, dendritic cells and NK cells from SLE patients respond abnormally to CpG ODN stimulation, which may contribute to the cytokine imbalance obsd. in SLE.
IT **537058-58-5 537058-59-6**
RL: BSU (Biological study, unclassified); BIOL (Biological study) (monocytes, dendritic cells and NK cells from lupus patients respond to CpG oligodeoxynucleotides stimulation and contribute to the cytokine imbalance)
REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 25 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:122818 CAPLUS
DOCUMENT NUMBER: 136:182447
TITLE: Vaccine against respiratory syncytial virus (RSV)
INVENTOR(S): Mond, James J.; Prince, Gregory; Klinman, Dennis M.
PATENT ASSIGNEE(S): Henry M. Jackson Foundation for the Advancement of Military Medicine, USA
SOURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002011761	A2	20020214	WO 2001-US41633	20010809
WO 2002011761	A3	20030123		

W: AU, CA, JP, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR

AU 2001085421	A5	20020218	AU 2001-85421		20010809
PRIORITY APPLN. INFO.:			US 2000-224011P	P	20000810
			US 2000-229307P	P	20000901
			WO 2001-US41633	W	20010809

ED Entered STN: 15 Feb 2002

AB The present invention relates to a vaccine comprising adjuvanting oligodideoxynucleotides (ODNs), contg. at least one CpG dinucleotide and an antigen comprising a peptide sequence bearing at least one epitope of a Paramyxoviridae F protein. In one embodiment, the ODN is admixed or conjugated to an F protein from a respiratory syncytial virus (RSV). The vaccine of the invention may be administered directly to mucosal tissues of the respiratory tract by inhalation or intranasal administration.

IT **400186-43-8 400186-47-2 400186-49-4**
400186-59-6
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vaccine compns. comprising Paramyxoviridae F protein epitopes and immunostimulatory oligonucleotides against respiratory syncytial virus)

L19 ANSWER 26 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:	2002:737476 CAPLUS
DOCUMENT NUMBER:	137:231323
TITLE:	CpG oligodeoxynucleotides induce human monocytes to mature into functional dendritic cells
AUTHOR(S):	Gursel, Mayda; Verthelyi, Daniela; Klinman, Dennis M.
CORPORATE SOURCE:	Section of Retroviral Immunology, Center for Biologics Evaluation and Research, Food and Drug Administration, Bethesda, MD, 20892, USA
SOURCE:	European Journal of Immunology (2002), 32(9), 2617-2622 CODEN: EJIMAF; ISSN: 0014-2980
PUBLISHER:	Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE:	Journal
LANGUAGE:	English

ED Entered STN: 29 Sep 2002

AB Dendritic cells (DC) excel at presenting antigen to T cells and thus make a key contribution to the induction of primary and secondary immune responses. DC matured in vitro and pulsed with antigen show promise for the immunotherapy of cancer and infectious diseases. Synthetic oligonucleotides (ODN) expressing immunomodulatory "CpG motifs" were found to boost APC function in mice. Current results demonstrate that the recently identified "D" type of CpG ODN stimulate human peripheral blood monocytes to mature into functionally active DC over 2-4 days. The transition from monocyte to DC is characterized by the upregulation of CD83, CD86, CD80, CD40 and the down-regulation of CD14. These DC support antigen-specific humoral and cellular responses in vitro and in vivo. The differentiation of these monocytes is mediated by plasmacytoid DC, which respond to D type ODN by secreting IFN-.alpha.. Since D type CpG motifs are present in bacterial and viral DNA, the maturation of monocytes into functional DC may reflect a physiol. response that can be harnessed therapeutically through the use of CpG ODN.

IT **459471-16-0 459471-17-1**
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(CpG oligodeoxynucleotides induce human monocytes to mature into functional dendritic cells)

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:124395 CAPLUS
DOCUMENT NUMBER: 136:293135
TITLE: CpG oligodeoxynucleotides as vaccine adjuvants in primates
AUTHOR(S): Verthelyi, Daniela; Kenney, Richard T.; Seder, Robert A.; Gam, Albert A.; Friedag, Brenda; Klinman, Dennis M.
CORPORATE SOURCE: Division of Viral Products, Center for Biologics Evaluation and Research/Food and Drug Administration, Bethesda, MD, 20892, USA
SOURCE: Journal of Immunology (2002), 168(4), 1659-1663
CODEN: JOIMA3; ISSN: 0022-1767
PUBLISHER: American Association of Immunologists
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 17 Feb 2002
AB Synthetic oligodeoxynucleotides (ODN) contg. unmethylated CpG motifs act as immune adjuvants in mice, boosting the humoral and cellular response to coadministered Ags. CpG ODN that stimulate human PBMC are only weakly active in mice. Thus, alternative animal models are needed to monitor the activity and safety of "human" CpG ODN in vivo. This work demonstrates that rhesus macaques recognize and respond to the same CpG motifs that trigger human immune cells. Coadministering CpG ODN with heat-killed Leishmania vaccine provided significantly increased protection of macaques against cutaneous Leishmania infection. These findings indicate that rhesus macaques provide a useful model for studying the in vivo activity of human CpG motifs, and that ODN expressing these motifs act as strong immune adjuvants.
IT **406966-34-5 406966-35-6**
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(CpG oligodeoxynucleotides as vaccine adjuvants in primates)
REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 28 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:903912 CAPLUS
DOCUMENT NUMBER: 136:52708
TITLE: Immunostimulatory RNA/DNA hybrid molecules
INVENTOR(S): Mond, James J.; Flora, Michael; Klinman, Dennis M.
PATENT ASSIGNEE(S): Biosynexus Incorporated, USA
SOURCE: PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001093902	A2	20011213	WO 2001-US18276	20010607
WO 2001093902	A3	20020418		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1292331 A2 20030319 EP 2001-941989 20010607
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2004052763 A1 20040318 US 2001-874991 20010607
PRIORITY APPLN. INFO.: US 2000-209797P P 20000607
WO 2001-US18276 W 20010607

ED Entered STN: 14 Dec 2001
AB The present invention provides immunol. compns. and methods relating to immunostimulatory intra-strand DNA/RNA hybrid oligonucleotides (HDRs), optimally encoding one or more CpG motif, which may be an unmethylated CpG motif. Administration of these compds., alone or in the context of one or more target antigens, promotes innate and antigen specific immunities.
IT **381260-42-0 381260-99-7 381261-01-4 381261-05-8 381261-06-9 381261-07-0 381261-08-1 381261-17-2 381261-19-4**
RL: PRP (Properties)
(unclaimed nucleotide sequence; immunostimulatory RNA/DNA hybrid mols.)

L19 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:125171 CAPLUS
DOCUMENT NUMBER: 134:294478
TITLE: Human peripheral blood cells differentially recognize and respond to two distinct CpG motifs
AUTHOR(S): Verthelyi, Daniela; Ishii, Ken J.; Gursel, Mayda; Takeshita, Fumihiko; Klinman, Dennis M.
CORPORATE SOURCE: Section of Retroviral Research, Center for Biologics Evaluation and Research, Food and Drug Administration, Bethesda, MD, 20892, USA
SOURCE: Journal of Immunology (2001), 166(4), 2372-2377
CODEN: JOIMA3; ISSN: 0022-1767
PUBLISHER: American Association of Immunologists
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 21 Feb 2001
AB Oligodeoxynucleotides (ODN) that contain unmethylated CpG dinucleotides trigger a strong innate immune response in vertebrates. CpG ODN show promise as vaccine adjuvants, anti-allergens, and immunoprotective agents in animal models. Their transition to clin. use requires the identification of motifs that are optimally stimulatory in humans. Anal. of hundreds of novel ODN resulted in the identification and characterization of two structurally distinct "clusters" of immunostimulatory CpG ODN. One cluster ("D") preferentially stimulates IFN-.gamma. prodn. by NK cells, whereas the other ("K") stimulates cell proliferation and the prodn. of IL-6 and IgM by monocytes and B cells. The distinct immunostimulatory properties of K and D ODN can improve the design of CpG-based products to achieve specific therapeutic goals.
IT **334074-91-8 334074-92-9**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(two distinct CpG motifs in stimulation of human peripheral blood cells)
REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 30 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:129322 CAPLUS
DOCUMENT NUMBER: 135:302807
TITLE: Response of porcine peripheral blood mononuclear cells to CpG-containing oligodeoxynucleotides
AUTHOR(S): Kamstrup, S.; Verthelyi, D.; Klinman, D. M.
CORPORATE SOURCE: Department for Pathobiology and Diagnostics, Danish Veterinary Institute for Virus Research, Kalvehave,

Lindholm, DK-4771, Den.
SOURCE: Veterinary Microbiology (2001), 78(4), 353-362
CODEN: VMICDQ; ISSN: 0378-1135
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 21 Feb 2001
AB Exposure to bacterial DNA generates a "danger signal" that stimulates cellular elements of the mammalian immune system to proliferate and/or secrete cytokines. Stimulation is critically dependent on hexameric motifs that contain an unmethylated CpG dinucleotide: these are commonly found in bacterial but not vertebrate DNA. Different motifs are optimally stimulatory in different species. This work examines whether oligodeoxynucleotides (ODNs) contg. CpG motifs stimulate peripheral blood mononuclear cells from pigs. Results show that pigs respond to CpG ODN by proliferating and secreting IL-6, IL-12 and TNF-.alpha.. By screening a large panel (>100) of ODNs, the palindromic hexamer 'ATCGAT' was identified as being optimally active in all animals examd. (N=10). These findings are the first to establish the immunostimulatory activity of CpG ODN in pigs, and suggest that the therapeutic uses envisioned for these ODNs (as vaccine adjuvants and immunoprotective agents) may be applicable to husbandry animals.
IT **366065-16-9**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(response of porcine peripheral blood mononuclear cells to CpG-contg. oligodeoxynucleotides)
REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 31 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1988:418981 CAPLUS
DOCUMENT NUMBER: 109:18981
TITLE: Base sequence effects in double-helical DNA. III. Average properties of curved DNA
AUTHOR(S): Maroun, Rachid C.; Olson, Wilma K.
CORPORATE SOURCE: Dep. Chem., Rutgers State Univ. New Jersey, New Brunswick, NJ, 08903, USA
SOURCE: Biopolymers (1988), 27(4), 585-603
CODEN: BIPMAA; ISSN: 0006-3525
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 22 Jul 1988
AB The matrix-generator methods set forth in the preceding paper for treating rodlike DNA are adapted here to the calcn. of av. chain extension, macroscopic flexibility, and terminal residue orientation in curved duplexes. The different characteristics of curved vs. rodlike chains are illustrated with the hypothetical poly[d(A5G5)] .cntdot. poly[d(T5C5)] duplex. The curved helix is both more compact and macroscopically stiffer than either the poly(dA) .cntdot. poly(dT) or the poly(dG) .cntdot. poly(dC) chain. The calcns. were also extended to simple repetitive DNA sequences generated by synthetic ligation studies and the computed av. chain properties compared with obsd. gel mobilities. The predicted chain extension is also checked against the measured persistence lengths of the rodlike poly[d(GC)] and poly[d(AT)] alternating copolymers, and the known cyclization tendencies of selected repeating sequences. Chains are generated from local potential energy maps describing the morphol. and flexibility of adjacent base pairs. The energy maps, while approx., are more accurate descriptors of local structure than many of the intuitive models of DNA curvature offered to date. According to the energy surfaces, the intrinsic bending of curved DNA can be traced to asymmetry

in the bending of the guanosine and cytidine residues that join half-helical turn stretches of adenines in these chains. The oligo (A) stretches are analogous to residues of a perfectly elastic DNA that bend with equal likelihood in opposing directions. In other models of DNA curvature, the (G .cntdot. C) base pairs are presumed to adopt the classical B-DNA structure, whereas the (A .cntdot. T) base pairs are thought to be in some perturbed conformation.

IT **115013-80-4 115013-83-7**
RL: BIOL (Biological study)
(flexibility and bending tendencies and dimensions of, calcn. of)

L19 ANSWER 32 OF 37 USPATFULL on STN

ACCESSION NUMBER:	2004:69536 USPATFULL		
TITLE:	Immunostimulatory RNA/DNA hybrid molecules		
INVENTOR(S):	Mond, James J., Silver Spring, MD, UNITED STATES Flora, Michael, Mt. Airy, MD, UNITED STATES Klinman, Dennis M., Potomac, MD, UNITED STATES		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004052763	A1	20040318
APPLICATION INFO.:	US 2001-874991	A1	20010607 (9)
	NUMBER		DATE
PRIORITY INFORMATION:	US 2000-209797P		20000607 (60)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP, 1300 I STREET, NW, WASHINGTON, DC, 20005		
NUMBER OF CLAIMS:	17		
EXEMPLARY CLAIM:	1		
LINE COUNT:	5120		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides immunological compositions and methods relating to immunostimulatory intra-strand DNA/RNA hybrid oligonucleotides (HDRs), optimally encoding one or more CpG motif, which may be an unmethylated CpG motif. Administration of these compounds, alone or in the context of one or more target antigens, promotes innate and antigen specific immunities.

IT **381260-42-0 381260-99-7 381261-01-4 381261-05-8 381261-06-9 381261-07-0 381261-08-1 381261-17-2 381261-19-4**
(unclaimed nucleotide sequence; immunostimulatory RNA/DNA hybrid mols.)

L19 ANSWER 33 OF 37 USPATFULL on STN

ACCESSION NUMBER:	2003:300800 USPATFULL		
TITLE:	Immunostimulatory nucleic acids		
INVENTOR(S):	Krieg, Arthur M., Wellesley, MA, UNITED STATES Schetter, Christian, Hilden, GERMANY, FEDERAL REPUBLIC OF Vollmer, Jorg, Dusseldorf, GERMANY, FEDERAL REPUBLIC OF		
PATENT ASSIGNEE(S):	University of Iowa Research Foundation, Iowa City, IA, 52242 (U.S. corporation)		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003212026	A1	20031113
APPLICATION INFO.:	US 2002-314578	A1	20021209 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2000-669187, filed on 25 Sep 2000, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-156113P	19990925 (60)
	US 1999-156135P	19990927 (60)
	US 2000-227436P	20000823 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Maria A. Trevisan, Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue, Boston, MA, 02210
NUMBER OF CLAIMS: 106
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Page(s)
LINE COUNT: 11893
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to immunostimulatory nucleic acid compositions and methods of using the compositions. The T-rich nucleic acids contain poly T sequences and/or have greater than 25% T nucleotide residues. The TG nucleic acids have TG dinucleotides. The C-rich nucleic acids have at least one poly-C region and/ore greater than 50% c nucleotides. These immunostimulatory nucleic acids function in a similar manner to nucleic acids containing CpG motifs. The invention also encompasses preferred CpG nucleic acids.

IT **331880-34-3**
(immunostimulatory nucleic acids)

L19 ANSWER 34 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2003:283122 USPATFULL
TITLE: Chimeric immunomodulatory compounds and methods of using the same - 11
INVENTOR(S): Fearon, Karen L., Lafayette, CA, UNITED STATES
Dina, Dino, Oakland, CA, UNITED STATES
Tuck, Stephen F., Oakland, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003199466	A1	20031023	
APPLICATION INFO.:	US 2002-177826	A1	20020621	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-299883P	20010621 (60)
	US 2002-375253P	20020423 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Randolph T. Apple, Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, CA, 94304-1018
NUMBER OF CLAIMS: 33
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Page(s)
LINE COUNT: 7228
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides immunomodulatory compounds and methods for immunomodulation of individuals using the immunomodulatory compounds.

IT **482663-88-7P 482663-89-8P**
(chimeric immunomodulatory compds. comprising nucleic acids linked through dendrimer or polysaccharide spacer and antigen for treating allergy, infection or cancer)

L19 ANSWER 35 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2003:250945 USPATFULL
TITLE: Chimeric immunomodulatory compounds and methods of using the same - I

INVENTOR(S): Fearon, Karen L., Lafayette, CA, UNITED STATES
Dina, Dino, Oakland, CA, UNITED STATES
Tuck, Stephen F., Oakland, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003175731	A1	20030918	
APPLICATION INFO.:	US 2002-176883	A1	20020621	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-299883P	20010621 (60)
	US 2002-375253P	20020423 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Randolph T. Apple, Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, CA, 94304-1018
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Page(s)
LINE COUNT: 7092
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides immunomodulatory compounds and methods for immunomodulation of individuals using the immunomodulatory compounds.

IT **482663-88-7P 482663-89-8P**
(chimeric immunomodulatory compds. comprising nucleic acids linked through dendrimer or polysaccharide spacer and antigen for treating allergy, infection or cancer)

L19 ANSWER 36 OF 37 USPATFULL on STN
ACCESSION NUMBER: 2003:214333 USPATFULL
TITLE: Combination motif immune stimulatory oligonucleotides with improved activity
INVENTOR(S): Krieg, Arthur M., Wellesley, MA, UNITED STATES
Vollmer, Jorg, Duesseldorf, GERMANY, FEDERAL REPUBLIC OF

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003148976	A1	20030807	
APPLICATION INFO.:	US 2002-224523	A1	20020819	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-313273P	20010817 (60)
	US 2002-393952P	20020703 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: WOLF GREENFIELD & SACKS, PC, FEDERAL RESERVE PLAZA, 600 ATLANTIC AVENUE, BOSTON, MA, 02210-2211
NUMBER OF CLAIMS: 72
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 29 Drawing Page(s)
LINE COUNT: 3159
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A class of immunostimulatory nucleic acids having at least two functionally and structurally defined domains is provided. This class of combination motif immunostimulatory nucleic acids activates an immune response and is useful for treating a variety of immune realted disorders such as cancer, infectious disease, and allergic disorders. The nucleic acids also stimulate activation of natural killer cells and production of type 1 interferon.

IT **500239-90-7**
(unclaimed nucleotide sequence; oligonucleotides contg. stimulatory phosphorothioate motif and neutralizing motif for treating infections, allergies and cancers)

L19 ANSWER 37 OF 37 USPATFULL on STN

ACCESSION NUMBER:	2003:79087 USPATFULL		
TITLE:	Inhibition of angiogenesis by nucleic acids		
INVENTOR(S):	Bratzler, Robert L., Concord, MA, UNITED STATES		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003055014	A1	20030320
APPLICATION INFO.:	US 2001-17995	A1	20011214 (10)
	NUMBER		DATE
PRIORITY INFORMATION:	US 2000-255534P		20001214 (60)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	Maria A. Trevisan, c/o Wolf, Greenfield & Sacks, P.C., Federal Reserve Plaza, 600 Atlantic Avenue, Boston, MA, 02210		
NUMBER OF CLAIMS:	74		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	1 Drawing Page(s)		
LINE COUNT:	3268		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to methods and products for inhibiting angiogenesis. At least one antiangiogenic nucleic acid molecule is administered to a subject to prevent or treat unwanted angiogenesis. Non-nucleic acid antiangiogenic agents also can be administered.

IT **441364-86-9D**, phosphorothioate linkage-contg.
(nucleic acids for inhibition of angiogenesis)

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